

COMMENTARIES

ON THE

HISTORY AND CURE OF DISEASES.

BY WILLIAM HEBERDEN, M.D.

Γεραν, καὶ καμνεῖν οὐκέτι δυναμένος, τοῦτο τὸ βίστιον ὑγραῖα, συγτάξας τὰς μεταπολλής τριῶν εν ταῖς ταῖς αὐθεόπαινον γούσις καταληφθεῖσας μοι παίρας.

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WILLIAM HEBERDEN

WAS born in London in the year 1710, and received the early part of his education in that city. At the close of the year 1724 he was sent to Saint John's College in Cambridge, and six years after was elected a Fellow. From that time he directed his attention to the study of medicine, which he pursued partly at Cambridge and partly in London. Having taken his degree of Doctor of Physic he practised in the University for about ten years, and during that time read every year a course of lectures on the *Materia Medica*. In the year 1746 he became a Fellow of the Royal College of Physicians, and two years afterwards, leaving Cambridge, he settled in London and was elected into the Royal Society. He very soon got into great business, which he followed with unremitting attention above thirty years, till it seemed prudent to withdraw a little from the fatigues of his profession. He therefore purchased a house at Windsor, to which he used ever afterwards to retire during some of the summer months; but returned to London in the winter, and still continued to visit the sick for many years.

In 1766 he recommended to the College of Physicians the first design of the *Medical Transactions*, in which he proposed to collect together such observations as might have occurred to any of their body, and were likely to illustrate the history or cure of diseases. The plan was soon adopted, and three volumes have successively been laid before the public. In 1778 the Royal Society of Medicine in Paris chose him into the number of their Associates. Besides the observations contained in the present volume, Doctor Heberden was the author of several papers in the *Medical Transactions*, and of some in the *Philosophical Transactions* of the Royal Society. He declined all professional business several years before his death, which was mercifully postponed till the year 1801, when he was advancing to the age of ninety-one.

From his early youth he had always entertained a deep sense of religion, a consummate love of virtue, an ardent thirst after knowledge, and an earnest desire to promote the welfare and happiness of all mankind. By these qualities, accompanied with great sweetness of manners, he acquired the love and esteem of all good men, in a degree which perhaps very few have experienced; and after passing an active life with the uniform testimony of a good conscience, he became an eminent example of its influence, in the cheerfulness and serenity of his latest age.

P R E F A C E.

PLUTARCH says,* that the life of a vestal virgin was divided into three portions ; in the first of which she learned the duties of her profession, in the second she practised them, and in the third she taught them to others. This is no bad model for the life of a physician : and as I have now passed through the two first of these times, I am willing to employ the remainder of my days in teaching what I know to any of my sons who may choose the profession of physic ; and to him I desire that these papers may be given.

The notes, from which the following observations were collected, were taken in the chambers of the sick from themselves, or from their attendants, where several things might occasion the omission of some material circumstances. These notes were read over every month, and such facts, as tended to throw any light upon the history of a distemper, or the effects of a remedy, were entered under the title of the distemper in another book, from which were extracted all the particulars there given, relating to the nature and cure of diseases. It appeared more advisable to give such facts only as were justified by the original papers, however imperfect, than either to supply their defects from memory, except in a very few instances, or than to borrow any thing from other writers.

The collections from the notes, as well as the notes themselves, were written in Latin, the diseases being arranged alphabetically : and this is the reason that the titles are here in that language. In making the extracts, it was not only more easy to follow the order in which the observations had been arranged, but there was likewise less danger of any confusion or omission ; and little or no incon-

* Plutarch in Numâ, et *περσευπερ πολιτευτ.*

venience can arise from preserving the Latin names of the distempers.

An useful addition might have been made to these papers by comparing them with the current doctrine of diseases and remedies, as also with what is laid down in practical writers, and with the account of those who treat of the dissections of morbid bodies ; but at my advanced age it would be to no purpose to think of such an undertaking.

August, 1782.

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COMMENTARIES ON THE HISTORY AND CURE OF DISEASES.

CHAPTER I.

Of Diet.

MANY physicians appear to be too strict and particular in the rules of diet and regimen, which they deliver as proper to be observed by all who are solicitous either to preserve or recover their health. The too anxious attention to these rules hath often hurt those who are well, and added unnecessarily to the distresses of the sick. The common experience of mankind will sufficiently acquaint any one with the sorts of food which are wholesome to the generality of men; and his own experience will teach him which of these agrees best with his particular constitution. Scarcely any other directions beside these are wanted, except that, as variety of food at the same meal, and poignant sauces, will tempt most persons to eat more than they can well digest, they ought therefore to be avoided by all who are afflicted with any chronical disorder, or wish to keep free from them. But whether meat should be boiled, or roasted, or dressed in any other plain way, and what sort of vegetables should be eaten with it, I never yet met with any person of common sense (except in an acute illness) whom I did not think much fitter to choose for himself, than I was to determine for him. Small beer, where it agrees, or water alone, are the properest liquors at meals. Wine or spirits mixed with water have gradually led on several to be sots, and have ruined more constitutions than ever were hurt by small beer, from its first invention.

In fevers a little more restraint is necessary, but not so much as is often enjoined. The stronger sorts of meat and fish are most usually loathed by the sick themselves, nor could they be eaten without offending the stomach, and increasing the distemper, while it is at all considerable; but in its decline, the sick are often desirous of some of the milder sorts of meat, and no harm follows from indulging their desire. The English nation are said to eat more meat when they are well than most others; but were remarkable, so long ago as the time of Erasmus, for avoiding it more scrupulously when they are sick, than any other people. How high soever the fever be, the sick may safely be nourished with weak broths and jellies, and

with any vegetable substances, if we except the acrid and aromatic, or with the infusions or decoctions prepared from them ; and I know no reason for preferring any of these to the rest. Eggs and milk have been, I know not by what authority, forbidden in all fevers ; but, as far as my experience goes, they both afford innocent food in the worst, where they are grateful to the patients.

The feverish thirst is best allayed by pure water, which may be drunk either warm, or cold, at the option of the sick person, and he may drink as much as he pleases ; but I see no advantage in persuading him to gorge himself with liquids, as is often done, against his inclination and stomach. If water be deemed too insipid, currant jelly, and a variety of syrups, may be dissolved in it ; or apples sliced or roasted, tamarinds, sage, or balm, or toasted bread, may be infused in it ; or decoctions may be made of oatmeal, barley, or rice ; or the water may be made into an emulsion with the oily seeds ; all which, with a variety of similar substances, merely correct its insipidness, but in other respects leave it just what it was.

There is scarcely any distemper, in every stage of which it may not be safely left to the patient's own choice, if he be perfectly in his senses, whether he will sit up, or keep his bed. His strength and his ease are chiefly to be attended to in settling this point ; and who can tell so well as himself, what his case requires, and what his strength will bear ?

Doubts are often raised about the propriety of changing the linen in sickness, just as there have been about changing the foul air of the sick chamber by any of the means which could refresh and purify it. There can be very little reason to fear any mischief from the cold which the sick may feel while their clean linen is putting on ; for their attendants, with common care, will do this as safely as many other things which must necessarily be done for them. But some have a strange opinion of harm from the smell of the soap perceivable in linen after it has been washed,* and therefore allow not their patients, when they change their linen, ever to put on fresh, but such only as has been worn, or lain in, by other persons. By this contrivance indeed the smell of the soap might be taken off, but few cleanly people would think they gained any advantage by the change. Now, if a faint smell of soap were noxious, then soap-makers, and laundry-servants, must be remarkably unhealthy ; which is contrary to experience : nor is it less so, that the sick are injured by the cleanliness of what they wear ; on the contrary, the removing of their foul things has often diffused over them a sense of ease and comfort, which has soon lulled them into a quiet and refreshing sleep.

CHAPTER II.

Ratio Medendi.

ONE of the first considerations in the cure of a disease is, whether

* Diemerbroeck de Peste, l. ii., c. 3, annot. 6.

it require any evacuations ; that is, whether it have been the general opinion of practical authors, that emetics, cathartics, diuretics, bleeding (by leeches, cupping-glasses, or the lancet), sudorifics, blisters, issues, sternutatories, or salivation, have in similar cases been found to be beneficial.

2dly. Whether it be a distemper, for which any specific, or certain remedy, has been found out. Many such, in all ages, and in every country, have been for a little while in fashion ; very few of which have justified the promises of their patrons, and answered the wishes of physicians and patients : so that there is no where more reason to be upon our guard, and to remember the old caution, *νεφελη μημνατεν απιστειν.* However, the honour of this title may be justly claimed by the Peruvian bark for the cure of agues ; quicksilver for Venereal disorders ; sulphur for the itch ; and perhaps opium for some spasms ; and Bath waters for the injury done to the stomach by drinking.

Besides the few remedies here mentioned, it may be doubted whether ten others have upon any good authority been reputed specifics, or certain remedies for particular diseases, the reputation of which has afterwards been sufficiently confirmed by experience. Borax has been celebrated as such for aphthae ; the Portland powder for the gout ; squills and the fetid gum-resins for the asthma ; soap-ley for the gravel and stone ; hemlock for cancers ; electrification for blindness ; antimony for continual fevers ; sugar of lead for hemorrhages ; and some few others for other distempers.

Though, among the pretended specifics, some have very little virtue, and others may be inconstant in their operations ; yet, if a physician be satisfied that they are safe, there may be many occasions when he may with propriety employ them.

3dly. Vomiting, purging, pain, and other troublesome symptoms, are in many cases so urgent, as to make some present relief indispensably requisite ; for the procuring of which, opium is very commonly the most effectual means.

4thly. In long and obstinate diseases, in which no particular remedy is found to have succeeded, it is often advisable to have recourse to the general means of strongly affecting, and of making considerable changes in the state of the body ; in hopes, by this shock, of dislodging the cause of the disease. For this end, mercury, antimony, hemlock, and electrification, are sometimes employed.

Lastly, where there is no room for any thing else, then it is the duty of a physician to exert himself as much as possible in supporting the powers of life, by strengthening the appetite and digestion, and by providing that the stools, and sleep, and every other article of health, shall approach as nearly as may be to its natural state.

There may be such a state of a distemper, in which the whole attention of the physician must be given up to the supporting and enlivening the vital powers ; but there can be no stage of any disease, which does not require some attention to this important point. As this is a precept, in the due observance of which the welfare of every patient is deeply interested, it will be worth while to say something more upon this subject.

To ἀργματ—ψυχη—Archæus — spiritus animales — Natura —

These and various other terms have been employed to denote the principle of life, or that unknown energy, which makes the difference between an animated body, and an inanimate mass of matter.

In the physiology and pathology of the human body, there has been perhaps both too much and too little use made of that vital principle which constitutes the animal. Some have pretended to a knowledge of it much beyond what we have hitherto attained, and have employed it in the ministry of the animal economy, and in explaining the causes and cures of diseases, guided much more by their own fancies and speculations, than by the authority of facts and experience ; while others, in accounting for the same appearances, have overlooked the laws and powers peculiar to animal life, and have endeavoured to solve all difficulties by the common mechanical powers, and by the general properties of dead matter.

Whatever animation be, experience has undoubtedly acquainted us with several means both of deadening, and of invigorating its operations. Of the first sort is in an eminent degree the foxglove, and all the narcotic poisons ; to the second belong wine and spirituous liquors, all strengtheners of the stomach, aromatics, and every thing capable of irritating the senses. But vinous liquors in a certain quantity oppress, and some of the narcotics in a small dose exhilarate the powers of life.

Many of the narcotics being applied in a small wound, to any part of the surface of the body, will have their full effect in damping or destroying the vital energy ; but most of them, and almost all of the opposite class, exert their powers only when taken down into the stomach ; the control and dominion of which part over the principle of animation throughout the whole body are such, that universal refreshment and invigoration, or faintness and death itself, will be the instantaneous effects of its being touched by certain friendly or injurious substances.

In all distempers it is one part of the physician's duty to remove or relieve, as far as can safely be done, the present inconveniences ; but the mischief principally to be dreaded in every illness is its tendency to destroy life ; and against this the patient is most solicitously to be guarded. Now of the means before mentioned by which the *vires vitae* can be supported and strengthened, great irritations of the senses can only afford a momentary relief in sudden languors and faintings. Wine and aromatics will indeed make a more lasting impression on the stomach, and in many languid illnesses may be administered with great advantage ; but they must be used with caution, as the vinous liquors may intoxicate, and both of them in many distempers may excite too great a degree of heat. Dr. Morton's practice in the last century has been much censured for his method of cure by an immoderate use of aromatics, for the purpose, as he says, of exciting and expanding the spiritus animales. A freer use may safely be made of the mild astringents and bitters, and there are perhaps few disorders in which they would not make very useful associates of other medicines. Camomile flowers in powder are suffi-

ciently grateful to the stomach ; but light infusions of the barks, and woods, and roots, are preferable to their powders. Of this very numerous class of simples a great variety of medicines may be made ; but none perhaps better, than an infusion made by one ounce of the Peruvian bark and one dram of the root of gentian, put into a pint of boiling water. I hardly know that distemper in which two ounées of this infusion might not be taken twice a day with safety, and, I believe, with advantage.

The Peruvian bark has been more objected to than any other of these medicines in cases of considerable inflammation, or where a free expectoration is of importance ; for it is supposed to have, beyond any other stomach medicine, such a strong bracing quality, as to tighten the fibres still more, which were already too much upon the stretch in an inflammation, and its astringency has been judged to be the likely means of checking or putting a stop to expectoration. All this appeared much more plausible when taught in the schools of physic, than probable when I attended to fact and experience. The unquestionable safety and acknowledged use of the bark in the worst stage of an inflammation, when it is tending to a mortification, affords a sufficient answer to the first of these objections ; and I have several times seen it given plentifully in the confluent small-pox, without lessening in any degree the expectoration. An asthma, which seemed to be near its last stage, became very little troublesome for several years, during which the patient took two scruples of the bark every morning and night. If great care be taken not to give it in such a manner as to load or oppress the stomach, every reasonable objection would, in my judgment, be removed, to the giving of it in any distemper whatever. For the purpose now under consideration, its efficacy is the same with any other bitters, but some preference may perhaps be due to this simply on account of its friendly powers to the human body, manifested in its being a specific remedy for intermittents : but if any one cannot quiet his own or his patient's apprehensions of some lurking mischief in the Peruvian bark, any other mild bitter* may be used for the same purpose of enabling nature to struggle successfully with the malady, by invigorating the principle of animation in the stomach. Too much attention can never be paid to this very important article of a just method of treating a patient ; every distemper requires it, and in many it is all that a physician can do.

It is a most alarming stage of any illness, when the stomach has so entirely lost its powers, that the person is averse from taking every thing that is offered ; as if nature were conscious that the vital powers were too nearly extinguished to be recoverable by any means, and therefore all were rejected ; this death of the stomach never fails to be soon succeeded by an universal loss of life.

* Such as a few grains of camomile flowers powdered in a neutral saline draught ; or an aromatic confection draught may be made up with a weak infusion of quassia wood, or columbo root ; or, if it be made up with any distilled water, twenty drops of the tincture of gentian, or of columbo root, may be added to each draught.

CHAPTER III.

Abdomen.

THE abdomen has been observed to swell from various other causes besides the more common ones of a dropsy either in the belly or ovaries, of pregnancy, or scirrhi of some of the viscera, or flatulence. The hard swelled bellies of children continue too long to be owing to flatulence, and they yield too soon to purging medicines to be occasioned by scirrhi. Upon the total ceasing of the menstrua, or upon a temporary obstruction of them, the abdomen will often be swelled, and continue so for some months. Women not uncommonly complain of such tumours after miscarriages, or after being brought to bed. Many of these swellings are probably owing to some secret power of the nerves, which they frequently exert when disturbed by several poisons. They have in some persons been known to continue for two or three years; and, after a violent headache, the whole body has swelled, and subsided within an hour. Very large swellings, continuing for two or three days, have been known to attend the attacks of the essera, or nettel rash. It has often happened to the same person to have a tumour of the abdomen disappear upon the sudden gushing of about a pint of water from the uterus. In one person, whose abdomen had been swelled for two or three years, a sudden swelling would often rise up in other parts, as on the thighs, back, and thorax, quite up to the neck. A tumour half as big as a child's head would suddenly rise up in the same patient's neck; and though the swelling of the belly never totally disappeared, yet it would sometimes in a morning be hardly perceivable, and in an instant the whole abdomen would become so distended that the skin seemed ready to break. She often felt something move from the stomach to the limbs, which were immediately convulsed.

There often occur pains in the abdomen, similar to those which are frequently felt in the thorax, in which the viscera seem not at all concerned, but which are rather of a rheumatic nature and will continue for a very long time. The remedies are — the volatile liniment, with, or without, the addition of laudanum; empl. cymini; a perpetual blister; an oily draught, with as much volatile salt as can easily be borne; opium; and all the rheumatic medicines.

CHAPTER IV.

Abortus.

ONE woman miscarried five-and-thirty times. Though the third month be most usually the time of miscarrying, yet there are some women who constantly miscarry about the fifth or sixth month; and in these the milk running out of their breasts is a sign of the approaching miscarriage. A woman who was with child of twins, miscarried of

one at the end of three months, but went on with the other, who was born at the proper time, and lived to maturity. Abortions are the effects of accidents, of mal-conformation, and of ill health : if frequently repeated, they are also the causes of ill health, and occasion the fluor albus, and the whole train of evils belonging to what is called the hysterick passion, and likewise those which are enumerated under the article of *a broken constitution*.* One woman, after frequent abortions, took for a long time three drachms of bark in a day while she was breeding, and went her time, and brought forth the strongest of all her children.

CHAPTER V.

Alvus.

A VERY great difference is observable in different constitutions in regard to the evacuation by stool. One man never went but once in a month ; another had twelve stools every day for thirty years, and afterwards seven in a day, for seven years, and in the mean time did not fall away, but rather grew fat.

The feces sometimes lie in the rectum for many months, and are collected into a large hard mass, which cannot be voided without the help of a surgeon. The signs of this are, pain in the belly ; a constant desire to go to stool, even just after an evacuation ; none but liquid feces are ever voided ; and the disorder is attended with a difficulty of making water.

The inner coat of the rectum is sometimes so relaxed as to come out after every stool, and in riding, and will not go up again without the assistance of the hand : an astringent fomentation may be applied with some advantage after every stool.

With the tape-worm, and with the ascarides, there is a most troublesome and almost intolerable itching of the fundament towards night.

Great pains are not uncommonly felt in the anus, which are sometimes relieved, but often exasperated, by stool, and are not unfrequently worse in bed than in the day time, and even then in walking or riding ; and in this state they will last several years.* A small blister kept open upon the thigh for two or three months has cured this disorder. These pains sometimes proceed from an inflammation, and are aggravated to an almost intolerable degree by sitting, standing, coughing, sneezing, or making water. Where the inflammation has suppurated, the healing of the abscess will in some constitutions be succeeded by broken health, or by a fatal pulmonary consumption ; whether it be because the disorder at first was not merely local, or because the habit of body became diseased by the too long continuance of the ulcer before it was properly opened and healed. In order to prevent these mischievous consequences, it is often advisable to open an issue as soon as the abscess begins to heal.†

* Chap. xciv.

See chap. xl, on the *Fistula .Ini.*

CHAPTER VI.

Aneurysma.

ANEURYSMATIC tumours of the neck will often continue for many years, attended with some degree of difficulty in breathing, and at last end in sudden death. Many tumours of the neck, apparently of this sort, from having a strong pulsation in them, have after several years spontaneously decreased, till at last they have almost disappeared.

CHAPTER VII.

Angina, and Scarlet Fever.

THE scarlet fever begins with the common symptoms of other fevers. On the first or second day an unusual redness appears on the skin, and there is a slight pain of the throat. At the same time in some patients there are swellings under each ear, or in other glands, which are not always dispersed without coming to suppuration. In others, the arms, and particularly the fingers, have swelled ; which swellings have happened indifferently, both where the disease hath proved gentle, and where it hath been fatal. On the third or fourth day the soreness of the throat goes off; about the sixth day the redness of the skin begins to retreat ; and, if all things go on well, the distemper abates very fast after the seventh day.

In some of these fevers the whole skin is coloured, in others only the breast and arms; and it is not uncommon to see the redness only on the back of the wrist. This scarlet colour is either equably diffused over the whole skin, without any spots or small pimplies, or is deeper coloured in some places, and lighter in others; or it is attended with little swellings, like the stinging of nettles; or else with very small eruptions, like the measles. After the redness has disappeared, the whole skin is often renewed, the old one either peeling off in large pieces, or becoming rough and branny, and so falling off. The redness of the skin affords no certain mark of the degree and event of the disorder : I have seen it become much more florid without any relief to the patient, and grow pale without any ill consequence : the warmth of the bed is so far from being always the certain means of making the eruption more florid and vigorous, that I remarked it in one patient to have been constantly faint and languid while she was in bed, and to have a far livelier hue as long as she was up.

The eruption is often attended with a very troublesome itching. It sometimes resembles the measles so exactly as not to be easily distinguished from the measles efflorescence ; though this be a matter of great importance, because the method of cure in these two distempers is extremely different. The redness of the scarlet fever is

more equally diffused than in the measles, and is not in distinct spots with the natural colour of the skin interposed ; yet, in some few cases, I have seen it so. Then in the measles the eruption rises more above the skin, and occasions a manifest roughness to the touch, which is hardly observable in the scarlet fever, except a very little roughness sometimes in the arms. In the scarlet fever there is no cough, the eyes do not water, and the eyelids are not red and swoln ; all which rarely fail to attend the measles. The time likewise of the eruption is different ; for it appears in the scarlet fever both in the face and arms on the first or second day ; but in the measles it begins only on the third day of the fever to be visible about the chin, and does not come to the arms and hands till the fourth or fifth day.

Beside the restlessness and languor, which are very great in the scarlet fever, several who have it in a great degree are troubled with a sharp humour in their throats and nostrils, which makes them deaf, and hoarse, and even dumb, and takes away their senses of tasting and smelling. The inside of the nostrils and all the upper lip has been so corroded with this humour as to leave these parts sore and scabbed for a long time after the ceasing of the fever.

This distemper is not often fatal ; and is sometimes so very slight as to last hardly a day, and would be utterly unnoticed, if, together with other very gentle symptoms, there were not some blush of redness perceptible in the skin, and if at the same time others of the family were not ill of this fever in a more violent manner, so as to leave no room to doubt about its nature.

There is no other distemper in which a delirium is of so little importance as in this ; in other fevers it seldom comes on till they have arrived at a dangerous height ; but it sometimes accompanies a scarlet fever on the very first day ; and many of these patients never fail to be light-headed every night, though, except this, there be not any unfavourable symptom from the beginning to the end of their illness.

The small-pox is not more infectious than this malady among children and very young persons of both sexes. After their twentieth year, men are very little liable to catch it, though I have seen one man in it who was four-and-thirty ; but I have not unfrequently known not only the middle-aged, but even elderly women ill of this distemper : however, the older they are, the more secure they are found to be from its contagion.

This fever has begun to show itself on the fifth day after the infection was, most probably, taken by those who, perfectly well before, have been brought to the house where some children were ill of it ; and perhaps the space of time intervening between the infection and sickening may here, as well as in the small-pox, be generally nearly the same.

Where the scarlet fever proves fatal, a coma will sometimes show itself about the fifth or sixth day, or a shortness of breath with spitting of blood, in those whose lungs appeared before to be sound.

Some few are attacked with such violence as to die within the first three days.

After the fever is much abated, and all danger is past, the glands under the ears will sometimes swell with considerable pain, and even come to suppuration, and in some the testicles have swelled: the limbs will also be afflicted with rheumatic pains.

In the fever which has just been described, there is always some degree of redness in the skin, and the throat is not without an uneasy sensation. Where it happens that the throat is full of little ulcers attended with considerable pain, there the disease, though the skin be ever so red, is not denominated from this colour, but from the soreness of the throat, and obtains the name of the *malignant sore throat*; and many suppose that the two disorders differ in nature as well as in name: of this let the reader judge, when he has considered the histories of both.

§ 2. *The Malignant Sore Throat.*

It is matter of doubt whether, in some instances of the malignant sore throat, the fever, or the aphthous ulcers, come first. For it is observable, that on the very first day of the fever, the fauces will sometimes appear so much loaded with them, as to make it improbable that they should all have come on and arrived at the state in which they appear within the space of one day. It is by no means unlikely that the patients should pay very little attention to these small sores; for they seem to occasion very little pain, far less than what is felt in a very slight inflammatory sore throat; and there is either no difficulty of swallowing, or, however, much less than one would imagine by seeing the condition of the throat. In the places where the ulcers are about to appear, the cuticle becomes whiter or ash-coloured; and when it is either rubbed off, or cracks of itself, a small ulcer is discovered without any pus. Not only as much of the fauces as can be seen, but the inside likewise of the nostrils, seems to be the seat of these ulcers. All these parts will be swelled when the sores are numerous, deep, and sordid; whence the patient becomes hoarse, and almost dumb. The external part of the throat, and the whole face, will also be sometimes swelled.

I have seen the whole skin intensely red on the very first day of the distemper; at other times only the breast and arms have had this colour; in some patients it has not been observable until the fourth day of the fever, and in many it is scarcely or never perceived at all. Where this redness was the most florid, the patients have not seemed at all the better; nor have they been apparently hurt when it has faded and disappeared.

Some judgment may be formed of the danger of the fever from the appearance of the aphthæ; for that will be greater in proportion as these occupy a larger space, and are deeper and more firmly fixed, and oftener grow again, and are of a more gangrenous hue. But the condition of these sores, though it be an index, yet is by no means the cause of the danger: for the enfeebled and disordered

state of all the functions of the body, evidently points out such a malignity of the fever, as cannot be owing to the affection of the uvula, or tonsils, which in other distempers we often see ulcered, and eaten away, without any danger of the patient's life. These sores, therefore, like pestilential buboes, point out the nature of the disorder ; but the danger arises not from them, but from the fever.

This distemper is sometimes so slight as to require no remedies, and sometimes so violent as to admit of no relief. Several become light-headed on the second day of the fever, or comatose, breathing with great difficulty, and bending back their heads as far as they can ; a purulent and offensive mucus flows from their nostrils, their throats appear gangrenous, and these symptoms are soon followed by death ; while others, after having shown some little appearances of this distemper for a day or two, recover without any assistance. But most of those who are afflicted with this fever, are very ill for six or seven days before they show any signs of amendment. While it continues, a remarkable flow of saliva often runs out of their mouths.

The languor, feebleness, and inquietude, are greater than might be expected from the apparent degree of fever. Where it proves fatal, the anxiety increases, and together with the coma, difficulty of breathing, and offensive mucus before mentioned, there is also an averseness from taking every kind of nourishment or drink. This happens not because they are unable to swallow, for I have often wondered to see how readily they could do this when they would try, though the fauces seemed full of sordid ulcers, and their breath could hardly be fetched. The trachea indeed seems to be the seat of these ulcers, rather than the œsophagus.

Among the rarer symptoms may be reckoned a profuse bleeding of the nose. I have likewise observed this disease to have been succeeded by rheumatic pains and swellings. Some persons, though this very rarely happens, have been infected with it more than once.

The malignant sore throat may justly be called the distemper of childhood and youth in males. Among many patients whom I have seen in this fever, I do not remember above two or three males who were past twenty, and only one who was more than thirty. Women are never entirely secure from it at any age, though the older they are, they are found to be the less apt to take the infection. The younger the patients are, the greater is their danger ; which is contrary to what happens in the measles and small-pox. In a child who died on the sixth day of this distemper, and was opened, the velum pendulum was putrid ; the tonsils were outwardly blackish, and livid within ; the ovula was covered with a thick mucus resembling a membrane ; the epiglottis was sound, and so was the œsophagus : but that mucous covering descended down the trachea quite to its division, in the upper part of which it appeared like a membrane, in the lower part it was more like mucus.

From the foregoing description of the scarlet fever and malignant sore throat, it seems highly probable that they are both names of the

same distemper, with some little variety in a few of the symptoms ; and this opinion is confirmed by our finding that they are both epidemic at the same time. Even in the same family, where a number of children have been ill together, or immediately after one another, some have had the distinguishing symptoms of the scarlet fever, and others of the malignant sore throat. But the solution of this question is of very little importance ; for, let the distempers be ever so different, the method of cure in both is exactly the same, except only what may be thought necessary to be applied to the ulcers of the throat.

There may be more use in determining, whether this fever, like the small-pox, be capable of infecting the same person more than once. According to my experience, some children have beyond all doubt been afflicted a second time with this disease : but it is evident that this happens very seldom ; for otherwise, in such a common distemper, there could be no more question about the possibility of a second infection, than there is in the itch, or in venereal disorders. I have met with several grown persons who have had frequent returns of a slight sore throat, which at these times was beset with little ulcers similar to those of the malignant sore throat, but without any, or, at most, without much fever, and without any discolouring of the skin. If this slight angina bear any relation to the malignant one, it is not more than subsists between the small-pox and those eruptions which are sometimes observable in such as have already had that disease, while they are nursing and attending others who are ill of it.

The very different nature of the malignant from that of the inflammatory sore throat, together with the tender age and weak habit of those who are most subject to it, have made physicians at present very generally agree to condemn bleeding, as what would be useless at best, and often hurtful to such patients. Yet in some few persons, whose strength seemed able to bear it, and whose heat, and headache, and manner of living, seemed to require it, I have known blood taken away once, and even twice, in the beginning of the distemper, with safety, and perhaps with advantage. All purging medicines should be avoided till towards the end of the fever ; and if a spontaneous diarrhoea come on, it should be checked as soon as possible. Blisters are peculiarly serviceable, and the patient should never be without one, or more, until he be out of danger. Decoctions, or infusions of the Peruvian bark joined with aromatics, appear to be the most useful medicines ; and equal parts of a decoction of the bark and of the pectoral decoction make a very good gargle. This gargle may be injected with a syringe into the throats of children : but this should by no means be done so often as to tease or fatigue them ; for the advantage of doing this does not seem to me to be very great above that of getting them frequently to wash their throats by drinking either this, or some more grateful liquor. Similar reasons would forbid us still more strongly, to take great pains in rubbing off the sloughs from these ulcers, or in scari-

fying them. Besides, in dangerous cases, the trachea and the nostrils are equally the seat of these foul ulcers, to the first of which nothing can be applied ; and if the noses of children were to be syringed, they would swallow whatever was washed from the nose into the stomach, where it would not improbably do more mischief, than in the place from which it had been removed. My only reason for suspecting that I ought to lay more stress upon applications made immediately to the throat, than I have here done, is, that several physicians of deservedly great authority, have judged them to be of more importance than they have appeared to me.

CHAPTER VIII.

Aphthæ.

ΑΦΤΗΛÆ are found chiefly in children, and old persons, and in tedious fevers. They are usually accompanied with a soreness of the throat, some difficulty of swallowing, and apparently of bringing up phlegm (for which they mistake the aphthæ), a hoarseness, and hiccup. The Peruvian bark is given safely in aphthous fevers, and perhaps advantageously.

Besides the aphthæ which accompany acute fevers in weak constitutions, there are some which may be called chronical : these will sometimes be very troublesome to the mouth, not only for months, but even years, without fever, or any other considerable complaint. Such aphthæ have continued for three years after a slight palsy of the face. The West-Indians sometimes bring this disorder with them into England ; and they have told me that it is a very common one in these islands, and sometimes ends in a fatal diarrhoea, or dysentery. The aphthæ are supposed not only to infest the mouth and fauces, but to be continued down through the whole intestinal canal. In two who died of a lingering fever, and whose mouth was covered with aphthæ, which hung in rags all over it, there was not the least trace of them that could be found in dissection beyond the fauces.

CHAPTER IX.

Arthritis.

THE gout most usually begins with a pain in the first joint of the great toe, which soon looks very red, and after a little while begins to swell. The violence of the first pain seldom lasts twenty-four hours ; but before it has quite ceased, another begins in the same, or some other part, where it continues as long. A succession of similar pains makes up a whole fit of the gout. These will be renewed every day, or with intervals of two, three, or more days, for a few days, or several weeks. And even after there has been such a long cessation, that the uses of the limbs were almost recovered, and the

swellings much abated, fresh accesses of pain have come on, and visited all their former seats, bringing back the lameness, and swellings, which the patient had hoped were for this time ended. It sometimes happens that a gouty pain, which was slight in the beginning, will continue to increase for several days.

The first fit seldom lasts above a week, or ten days : during the whole of it, and commonly of the two or three succeeding ones, no pain is felt any where, except in the place where it began. Afterwards various parts of the feet, the knees, or hands will suffer before the fit ceases ; and in process of time there will scarcely be any part of the body secure from its fury. The greatest torment is usually felt after the first sleep. Has the gout therefore any relation to those complaints which have been styled nervous, and which are remarkably worse at this time ? However, in some the raging is greater in the day-time than at night. There will at first be an interval of two or three years, or more, between the fits ; but after some time they will be repeated once or twice every year. The attacks of an old gout are less painful, but of longer continuance, and are attended with a greater and more lasting weakness. Most gouts continue to return to the end of life. I never knew a certain instance of their beginning before the years of puberty.

Though the toe be the usual place in which a regular gout first fixes itself, yet it will not very unfrequently prefer the instep, the heel, or the ankle : but if the first attack be felt in any other part besides these, the continuance of such a pain, the returns of it, and its consequences, will differ so much from those of the ordinary gout, that it is either to be called a rheumatism, or should be distinguished by some peculiar name from both these distempers. For, besides those cases which no one would scruple to call rheumatic, similar pains have been found to come on, and have not only, like the common rheumatism, continued for two or three months attacking by turns all the limbs ; but have in their first year returned two or three times, and have continued to do so for some succeeding years. These pains are less violent than in the common gout, though the swellings are much greater : but the remarkable circumstance is the great and lasting feebleness which they occasion ; so that the limbs have been more weakened by them in two years, than they usually are even by severe fits of the regular gout in twenty. The late Dr. Oliver of Bath told me, that he considered this disorder as partaking of the nature both of the rheumatism and palsy. In the cases which I have observed of this malady, whatever it be named, when the pain does not first attack the foot, and when its returns are so frequent, it has more usually come on after the sixtieth year, than before that age : yet there have been instances where young men have been made cripples by it long before they were thirty.*

The gout is derived from gouty ancestors, or is created by intemperance, or arises from some unknown causes, which are sometimes found in the sober and abstemious, none of whose family had pre-

* See chap. lxxix, on the *Rheumatism*.

viously been afflicted with this distemper. Women are less subject to it than men ; yet examples of gouty women are by no means rare : it has even spared all the children of gouty parents except one of the daughters ; and I have known a female who suffered by the gout to the degree of having numerous sores from chalkstones, though it had never been heard of among any of her relations.

Violent fits frequently repeated, usually produce chalkstones and chalky sores, and by these, or in consequence of numerous inflammations, make the joints stiff and almost useless. The cramp may also be reckoned one of the certain attendants upon the gout. Flatulencies, heartburn, indigestion, loss of appetite, sickness, vomiting, acidities, with pains of the stomach and bowels, giddiness, confusion and noises in the head, numbness of the limbs, epilepsies, palsies, apoplexies, quietude, universal aches, wastings of the fleshy and strength and lowness of spirits, are symptoms, some of which often attend the fit, and some follow it ; and most of them are the lot of old gouty patients, who have moreover the prospect of entailing all these upon their posterity.

Though at first the gout return but rarely, yet at length it becomes familiar, returning oftener, and staying longer, and by the uncertainty of the fits interrupting all business, and disappointing all pleasures. During its presence the patient is helpless as an infant, and without those circumstances which make an infant so easily and cheerfully assisted. It can hardly be reckoned one of the disadvantages of the gout, that after destroying all the comforts of living, by this weight of misery, or by bringing on a palsy or apoplexy, it immaturely extinguishes the powers of life. Yet people are neither ashamed, nor afraid of it ; but are rather ambitious of supposing that every complaint arises from a gouty cause, and support themselves with the hopes that they shall one day have the gout, and use variety of means for this purpose, which happily for them are generally ineffectual.

Various distempers in certain ages and countries have had the fashion on their side, and have been thought reputable and desirable : others, on the contrary, have been reckoned scandalous and dreadful ; not from any circumstance belonging to the distempers themselves, or to the manner in which they are contracted, but from some prejudice or fancy not easily to be accounted for. Epilepsies seem to have been held in particular abomination by the ancient Romans ; and ruptures both with them and with the moderns, have been attended with as unmerited a shame. Some maladies have been esteemed honourable, because they have accidentally attacked the great, or because they usually belong to the wealthy, who live in plenty and ease. We have all heard of the courtiers who mimicked the wry neck of Alexander the Great ; and when Lewis XIV. happened to have a fistula, the French Surgeons of that time complain of their being incessantly teased by people, who pretended, whatever their complaints were, that they proceeded from a fistula : and if there had been in France a mineral water reputed capable of giving it them, they would perhaps have flocked thither as eagerly as English-

men resort to Bath in order to get the gout. For this seems to be the favourite disease of the present age in England ; wished for by those who have it not, and boasted of by those who fancy they have it, though very sincerely lamented by most who in reality suffer its tyranny. Hence, by a peculiar fate, more pains seem to be taken at present to breed or produce the gout, than to find out its remedy. For, so much respect hath been shown to this distemper, that all the other ails, except pain, which the real or supposed gouty patient ever feels, are imputed most commonly not to his having had too much of this disease, but to his wanting more ; and the gout, far from being blamed as the cause, is looked up to as the expected deliverer from these evils.

The love of life, or fear of death, makes most men unwilling to allow that their constitution is breaking ; and for this reason they are ready to impute to any other cause what in reality are the signs of approaching and unavoidable decay. Hence, in a beginning failure or languidness of the functions of life, they easily persuade themselves that their complaints are all owing to a lurkinggout, and that nothing is wanted but a just fit, to the re-establishment of their health. Now, to say nothing of the slight grounds upon which these fond hopes of a latent gout are generally founded, is it as certainly true as it is commonly believed, that this distemper, when it comes to a strong fit, clears the constitution from all others ; and that by creating or exciting it, we should not superadd one more evil to those which were suffered before ? The itch is supposed to be wholesome in some countries, where it is endemic ; and ague has been considered as a minister of health, whose presence and stay ought by all means to be courted. These opinions are now pretty generally exploded in England ; and I hope the time will come, when a specific for the gout, as certain as those which have been discovered for these two disorders, will ascertain the equal safety and advantage of immediately stopping its career and preventing its returns.

If we ask what reason there is to consider the gout as a critical discharge of peccant humours, more than a rheumatism, palsy, or epilepsy, we can only be referred to experience for the proof ; and some indeed in the first attack of the gout congratulate themselves upon the completion of their wishes, and during the honey-moon of the first fit, dreaming of nothing but perfect health and happiness, persuade themselves that they are much the better for it ; for new medicines, and new methods of cure, always work miracles for a while. Of such we must not inquire, but of those who have had it their companion for a great part of their lives. Now, among those gouts which I have had opportunity of seeing, I find by the notes which I have taken, that the patients, in whom they have supervened other distempers without relieving them, or where they have been thought to bring on new disorders, are at least double in number to those in whom they have been judged to befriend the constitution ; and it has appeared to me, that the mischief which has been laid to their charge, was much more certainly owing to them, than the good

which they had the credit of doing. Other disorders will indeed sometimes be suspended upon an attack of the gout; and so they will by palseies, fevers, asthmas, small-pox, and madness, of which I have seen many instances; but then the gout has often come on when persons were labouring under vertigos, shortness of breath, loss of appetite, and dejection of spirits, without affording the least relief, and sometimes it has manifestly aggravated them; nay, these complaints have in some patients always come on with the gout, and have constantly attended it during the whole fit.

If the gout return but seldom, and its stay be but short, the patient may be very little the worse for it; just as he might have had an epileptic fit once in a year, and yet might die in a good old age. However, the health, as I have observed, will sometimes begin to decline even from the first fit, and gradually sink from that time under the usual signs of an irreparably shattered constitution; where, though there might be some doubt whether the gout occasioned the mischief, yet there could be none that it did not prevent it.

In an old gout, as was before observed, much of that intenseness of pain is abated which accompanied the early fits; and this may have given occasion to the opinion, that those complaints which were truly owing to age or other distempers, or perhaps to repeated fits of the gout itself, were to be imputed to the want of more pain, and of stronger fits. I remember a person who for fifteen years had every year a return of gout; and during all this time he was troubled with an asthma: at length the health became ruined, and his constitution utterly broken; and it was remarkable that during the five years in which he continued languishing before he died, he suffered neither gout nor asthma. Now no one would suppose, that in this case the ill health was at all owing to the want of an asthma; and what better reason was there to believe that it was owing to a want of the gout? The violence of the fits is so far from being useful to the health, that to this circumstance, and the frequency of them, must be imputed the quicker progress which they make in rendering the limbs of some patients useless sooner than those of others, and in bringing on those other ailments which I suspect to be the genuine offspring of the gout; so that some persons will find their health more impaired by it in seven years, than others will in thirty.

The true arthritic paroxysms, after a few visits, is well known to return in most patients very regularly every year; but I have seen those in whom after having returned yearly for ten, twelve, fourteen, twenty, and even twenty-eight years, no fit has been felt for three years, for ten, and twelve, and even for thirty years, without any kind of harm which could be attributed to its absence. Such cases teach us that constant returns of the gout are by no means so necessary to the health of arthritic patients as has been surmised; and that they may very well be spared, even after having so far accustomed the constitution to the gout, that health and life, according to the vulgar notion, could hardly be carried on without its seasonable aid; nor need we therefore be so much afraid of looking out for

and employing such potent medicines ; as may be specific antidotes to this peculiar poison.

But let the producing or maturing of a suppressed or unformed gout be ever so advantageous, still, all physicians must allow the criteria of it to be very obscure, and that there are none by which we can know, and I think hardly any which give us ground to suspect this disease, where there is no pain, nor redness, nor swelling in the first joint of the great toe, or in any other part of the foot, and where the person never had the gout, nor has any hereditary right to it. Yet, notwithstanding the absence of all these circumstances, it is not uncommon to see it charged with being the cause of almost every beginning chronical disease, and of some acute ones. An error here is often attended, among other ill consequences, with that of inducing people to drink a much greater quantity of wine, and spirits, than they have ever been accustomed to, or than they ought ever to drink ; so that I have seen several intoxicate themselves with strong liquors, for two or three days together, upon presumption that they wanted a gouty fit, and that this was a proper way of procuring one. Now, a long course of intemperance and debauchery probably disposes a man to breed this dreadful disorder ; but the drinking an immoderate quantity of inebriating liquor is in my judgment more likely to oppress, than to assist the powers of nature, in struggling under the approaches even of the gout ; and few will dispute this in any other illness, which may be, and often is, mistaken for the gout. I have too much reason to say, that not only the chronical disorders of carious bones, scirrhouſe and cancerous tumours of the brain, lungs, and abdominal viscera, but even the acute ones of peripneumonies, and inflammations of the stomach and bowels, have been supposed arthritic, and have been accordingly treated with Bath waters, or with the strongest spices and spirituous liquors, till they became utterly incapable either of cure or palliation ; which treatment has, I fear, done much less good in the true internal gout, than it has done harm by aggravating the pains and fever, where the gout has been falsely suspected.

The gout is indeed a common distemper, but not quite so common as is imagined ; nor has experience satisfied me, that in the beginning it is so very apt to mistake its way to the extremities, and, instead of them, to fix upon and oppress the functions of the brain, or lungs, or stomach, though in its advanced state this sometimes happens. Wherever there is a doubt whether the distemper be gouty, or what is called inflammatory and requiring a cooling regimen, there blisters, and other remedies suitable to both these cases, should be used till the doubt can be cleared up by a little delay : but if the danger be too urgent to admit of this, it will be far more hazardous to neglect bleeding in an inflammatory distemper, than to take away blood in the gout, which is indeed discouraged by Sydenham ; nor do I know that it is advisable ; but it is not a practice attended with any certain and constant danger. One person was bled by his own direction in every fit of the gout for six-and-thirty years ; and bleeding was a

frequent practice with another in the agony of the paroxysm, which it always abated so as to bring on a sound and refreshing sleep without any manifest ill effect. If the lungs be strongly affected, bleeding will often be unavoidable and necessary, though we be sure that it is a gouty affection. In complaints of a chronical nature, whatever suspicions there may be of gout, it would be no bad rule of practice not to direct the waters of Bath, nor any other remedies which are supposed to give the gout, if they would be improper when the same complaints arise from other causes; but to content ourselves with putting the general health into the best state, by strengthening the appetite and digestion, and by relieving any urgent symptoms.

I shall not enter into an examination of the efficacy of Bath waters, and of spicy or spirituous medicines in producing the gout, if this were ever so advisable. Experience will soon convince any one, that, if there be any such powers, they are far overrated. The slight wandering pains, which may be felt upon using these means, and are called gouty efforts, are what perhaps may be felt at any time, if they were as much watched and attended to, in such as have passed the meridian of life.

The gout affords a striking proof of the long experience and wary attention necessary to find out the nature of diseases and their remedies. For though this distemper be older than any medical records, and in all ages so common; and besides, according to Sydenham, chiefly attacks men of sense and reflection, who would be able, as well as willing, to improve every hint which reason or accident might throw in their way; yet we are still greatly in the dark about its causes and effects, and the right method in which it should be treated. But as the supposed hazard of curing it is now the general belief, it seems but reasonable that it should not be made the opprobrium of the art of healing, till the patients will conquer their fears, and allow that it ought to be cured. Happy, however, would it be for mankind, if the difficulty of curing the gout were to become as little as the danger of it.

The brain, and the stomach, with the bowels, are great sufferers by this distemper, as well as the limbs. Issues are a probable means of securing the brain from the mischievous effects of repeated fits; and bitters, and eccoprotics, are the proper remedies which reason would suggest for the stomach: the utility of all which means hath been confirmed to me by experience.

Strong wines, and in no small quantity, have the reputation of being highly beneficial to gouty persons; which notion they have very readily and generally received, not so much perhaps from a reasonable persuasion of its truth, as from a desire that it should be true, because they love wine. Let them consider that a free use of vinous and spirituous liquors peculiarly hurts the stomach and organs of digestion, and that the gout is bred and fostered by those who indulge themselves in drinking much wine; while the poorer part of mankind, who can get very little stronger than water to drink, have better appetites than wine-drinkers, and better digestions, and are

far less subject to arthritic complaints. The most perfect cures of which I have been a witness, have been effected by a total abstinence from spirits, and wine, and flesh; which in two or three instances hath restored the helpless and miserable patients from a state worse than death, to active and comfortable life: but I have seen too few examples of the success of this method, to be confident or satisfied of its general utility.

A question may be made, whether the patient should yield to the gout upon its first approach, and indulge it with ease; or by endeavouring to move and use the gouty limb, should resist it as long as he is able. By indulgence the fit lasts the longer; and this is sometimes what the patient wishes, and what the physician is requested to effect, from a notion that the gouty matter accumulates in some constitutions, and at certain periods requires a discharge, which ought to be free and copious, that the unnatural load may be perfectly thrown off. On the other side, some, more from impatience than from system, have employed all the means they could devise to stifle a fit as soon as its coming was perceived. The great Dr. Harvey, as I have been told by some of his relations, upon the first approach of gouty pains in his foot, would instantly put them off by plunging the leg into a pail of cold water. I have known several, who instead of nursing a beginning gout with warmth and repose, have used the utmost resolution and exertion in moving and exercising the limb, which they found themselves gradually able to do more and more, till at last they recovered its perfect use, free from any feelings of pain, and without any manifest ill consequences. How much may be done by vigorous efforts to shake off the gout we know by many unquestionable facts. Arthritic patients, who were as incapable of moving themselves as their malady could make them, upon the sudden alarm of fire, or other dangers, have, by an instantaneous exertion, recovered, and made very good use of their limbs.

I do not recommend Dr. Harvey's example as proper to be imitated, though it is known he lived to a good old age; but I am not warranted by any experience to condemn the practice of endeavouring by exercising the limb to prevent the gout from settling there. If indeed a fit of the gout be only giving vent to matter which has been collected and ought to be discharged, how comes it to pass that the taking of purging physic at the end of a regular fit will be apt to bring on a fresh fit? which I have reason to believe not only from my own experience, but upon better authority than my own. Similar effects have so often happened from an accidental hurt of a limb by a blow or strain, or even the sting of a gnat, that the hypothesis of accumulated gouty matter can scarcely be allowed to be the cause of every fit.

Those who choose to invite the stay of the gout, and are afraid of disturbing its repose by any motions of the affected limbs, often add very unnecessarily to the difficulty of moving them, by the quantity of flannel in which they are wrapped up even in the hottest weather. I never could see any reason for adding at all to the usual covering

of the limb, unless its extraordinary tenderness, or the severity of the weather, might make it a very little more necessary to keep off the sensation of cold, so disagreeable to a part which is swelled and in pain. The waters of Bath are reputed to possess specific virtues in gouty complaints. There seems to be great confusion, and some inconsistency, in the prevailing opinions about these virtues; for the existence of many of which it would be difficult to allege any satisfactory proofs from reason, or from any experience which has fallen within my observation. In many stomach complaints they are found very beneficial; and as the stomachs of arthritic persons are exceedingly subject to weakness, flatulence, acidities, and indigestion, the drinking of these waters often proves a great relief to them, both during the fits and in the intervals. What other powers their internal use possesses of creating or curing the gout, or of lessening any part of its misery, remains a matter of great doubt and obscurity. I have not been able to observe any good in arthritic cases from the external use of these waters, either when the distemper was present, or in its absence: on the contrary, it has rather appeared to increase the weakness of the limbs; and sea-bathing has contributed far more to recovering the strength of gouty persons, many of whom, in the intervals of their fits, have used it with safety and advantage.

When the gout is conjectured to have seized the stomach, it has been usual to endeavour to relieve the pain and sickness by strong wines, and spirituous liquors, poured down in great abundance. According to all my observation of such cases, I judge that opium, and hot spices afford more efficacious remedies, and are attended with less inconvenience.

The Portland powder is one of a great crowd of specifics, of which the rise, and reign, and fall, have all happened within my memory. It rose into favour too fast, and too high, to keep its place; but it appears to me to have sunk into a state of discredit and neglect, as much below its real merit, as the first praises were above it. Before the Peruvian bark was discovered, mankind had by repeated trials come to confide in the use of those medicines which are next akin to the bark, and will often very effectually cure an intermittent fever, even sometimes where the bark has failed. In other distempers we may observe a like gradual dawning of the just method of treating them, long before time and experience had advanced it so far as to make it generally perceived and acknowledged. Nor is it a small ground of expectation from any medicines, that in them the experience of many ages, and different countries, has seemed disposed to centre. This in some measure is the case of the Portland powder, many of its ingredients being commended as anti-arthritis remedies, by a variety of writers both ancient and modern: * and the peculiar mischief which this distemper does to the appetite and digestion, makes it probable that its power might be so far curbed and counteracted by whatever strengthens the stomach, as to afford us hopes of considerable relief, if not a cure.

* See *Medical Observations and Inquiries by a Society of London Physicians*, vol. i., art. 14.

The Portland powder lost its reputation, partly by the largeness of the dose, which, though almost too great for any one, was indiscriminately given to all, and partly by having all the natural ill effects of the gout imputed to it, particularly palsies and apoplexies; to the causing of which diseases I judge the gout to have of itself a tendency, because I have several times known them succeed immediately to a regular and severe fit. However, the virtues of this powder often appeared to be such, as to make it well deserve some pains, in trying to secure its good qualities, and to correct its faults: for during the great vogue of this medicine, the fit was so frequently found to be lessened, or to miss its usual time of coming, after this remedy had been taken, that few can have any doubt, and for my own part I have none, of its having produced these effects; while its having any share in the mischief imputed to it is void of any certain proof, or, in my opinion, of much probability. Nor indeed was its disgrace owing to its doing too little, but to its doing too much. The dread of being cured of the gout was, and is still, much greater than the dread of having it; and the world seems agreed patiently to submit to this tyrant, lest a worse should come in its room.

If the strengthening of the appetite and digestion be those effects of the Portland powder, by which it has either shortened or prevented the gouty attacks, then it may be much improved by leaving out some ingredients not very useful for this purpose, and, instead of giving the same dose to all, by using great attention in proportioning the strength and quantity so as to make it be easily borne by the patient. It will be absurd to attempt strengthening the stomach by such means as will not fail, either by their load or nauseousness, to bring on disgust and loathing, which has frequently happened in the use of the Portland powder.

The herbs germander, ground-pine, worm-wood, carduus benedictus, bog-bean or bug-bane, horehound, and the lesser centaury, the flowers of camomile, Seville orange peel, the Peruvian bark, and the roots of columbo, and gentian, are the principal stomachic simples; which perhaps exert their powers more fully in powder, than in an infusion or tincture. This variety affords us scope for contriving a medicine tolerable to the palate, and agreeable to the stomach of almost every patient. It is impossible to decide, without trial, which of these would be the best borne by any particular patient; and, lest any one should be peculiarly disagreeable, it will be useful to mix three or four of them together, by which their general benefit may be obtained; while the separate qualities of each, to some of which the patient might have a dislike, would be too inconsiderable to occasion any inconvenience. The length of time during which it must be continued is an additional reason for carefully avoiding every thing offensive, either in the quality, or dose of the medicine; at the same time it should be made as powerful, and as much should be given, as can easily be borne. Not less than fifteen grains should be directed twice a day, in a little simple peppermint water or common water; and few would bear to take more than two scruples for a continuance. Three or four grains of any aromatic most agreeable

to the patient would be an useful addition, by assisting the stomachic virtues of the bitter, and by enabling the patient to persevere for two years or more in taking it; as the aromatic might be varied, and give a new taste to the medicine, as often as any disgust arose.

Before I conclude this article, it may not be improper to lay down the distinguishing characteristics of what I would call gout, and rheumatism.

In the former of these disorders the first attack, consisting perhaps of several ragings and remissions, is wholly confined to the first joint of the great toe, or however to some parts of the foot; and the fit does not usually last above ten days or a fortnight.

The pains are sometimes preceded either by a considerable fever, or by slight feels of illness, which for a few days make the sleep less sound, or in a small degree abate the vigour of the appetite, digestion, spirits, and strength.

The part affected is coloured with a deep redness, and is so intensely pained as hardly to bear the gentlest pressure.

The pains are almost always found to return within a few years, and, after a few visits, to make their returns oftener, and their stay longer, extending themselves by degrees to every part of the body, which they enfeeble, or harass with chalk sores, or make useless, by the effects of frequent inflammations in destroying the motion of the joints.

They are apt to desert the limbs, and fall upon the stomach, lungs, heart, or brain.

They seldom, if ever, attack any who are not past the years of puberty.

Lastly, they are for the most part transmitted to the descendants of those who have suffered in any considerable degree.

These appear to me to be the marks of the genuine gout, in almost every one of which it differs from what I would call the rheumatism. For this does not begin in the foot preferably to any other part; and it seldom continues long in the same place, but will be perpetually wandering over the whole body, even during the first fit, which has been known to last for several months.

Rheumatic pains will come on suddenly, and without any preparatory symptoms.

In rheumatisms, the chief pain arises from moving the part affected, which while at rest gives for the most part rather the sensation of lassitude, than of anguish and torture.

The discolouring of the skin, if there be any, is not a deep red, but rather a faint blush.

A severe fit of the rheumatism often happens without ever returning through a very long life, and hardly ever makes periodical returns like the gout.

Rheumatic pains very rarely desert the muscles and joints, to seize upon the vital parts.

Very young children will labour under violent rheumatisms; and particularly those who have in them by inheritance the seeds of a gout with which they are to be afflicted when they arrive at manhood.

These are, according to my judgment, the principal characters of the two distempers ; but it must be owned that there are cases, in which the criteria of both are so blended together, that it is not easy to determine whether the pains be gout or rheumatism.

The difficulty of distinguishing these two maladies will be of the greater or less moment, according to the result of a very important inquiry ; namely, how far these two distempers, which, though of the same family, are marked with such different features, resemble one another in the treatment and cure which they require. Most practitioners indeed have formerly determined, that the remedies against the gout and rheumatism are of a directly opposite nature ; that no cordials are too strong for the one, and no evacuations too plentiful for the other. Sydenham condemns taking away blood in the gout ; but in the rheumatism advises not less than four copious bleedings within the space of six or seven days, and sometimes repeated the bleeding oftener. However in his later writings* he is manifestly disposed to abate a little of the violence of this method, which he owns to have found attended in one patient with great inconveniences.

Since Sydenham's time the antiphlogistic treatment appears, upon further trial, to have lost still more ground. The time may come when the gout will be treated more as an inflammatory distemper ; and evacuations less plentifully employed in rheumatisms ; so that the cures of the two diseases may at last approach very near to each other. The Portland powder professes itself equally adapted to both ; and some medicines of this sort, with an occasional use of opium, may at length be found the most efficacious anti-arthritis and anti-rheumatic remedies.

CHAPTER X.

Ascarides.

SOME symptoms afford very probable reasons to conjecture that there are worms in the stomach or bowels ; but no certain judgment can be formed that they ever have been there, unless the patient has actually voided them : and great care should be taken not to be imposed upon by the appearance of a ropy slime, which is often mistaken for worms, or is supposed to be the vagina of worms ; though I have no experience to satisfy me that real worms ever have such a sheath or envelope. It has been known, that people have voided round worms without being sensible of having ever felt any inconvenience from them ; and others have all the supposed effects of worms without ever voiding a worm of any sort.

The ascarides are almost always attended with an itching of the anus, particularly in the evening ; but, this symptom excepted, I hardly know any which peculiarly belongs to them. This itching, and the consequent rubbing of the part, occasion little tumours to arise about the anus, which are different from the piles, not being swelled veins.

* The conclusion of his first Epist. Resp.

Sickness, gripings, faintings, tremblings, indigestion, giddiness, pains of the head and stomach, too much or too little appetite, itching of the nose, unquiet sleep, coughs, offensive breath, have all been found in different persons together with ascarides ; but experience teaches us that none of these symptoms are necessarily connected with them ; and therefore it is doubtful, whenever they have met, whether chance or the nature of the distemper, have had the greatest share in bringing them together. This sort of worm has continued for twenty or thirty years without doing any considerable injury to the health. They not only are forced out with the excrement, but sometimes creep out of the body of their own accord, and sometimes, as I have been told, even through the nostrils. A repetition of gentle purges alleviates whatever uneasiness they may occasion ; but no internal medicines, nor clysters, can certainly be depended upon for extirpating them. Tobacco clysters, and others made of solutions of sublimate mercury, have had little or no effect.

CHAPTER XI.

Asthma.

THE first fit of the asthma has been experienced at all times, from the earliest infancy to extreme old age, and in every intermediate stage of life. Pleurisies, peripneumonies, and frequent catarrhs, often end in this distemper. A mal-conformation of the breast, and a cough returning every winter, and becoming worse and worse, bring on an incurable asthma. In some it comes on suddenly, without any manifest previous illness. Very violent fits of it will allow long intervals of apparently perfect freedom from any difficulty of breathing. There have been instances of its returning every other day, or every week, or once a month, or three or four times in a year about the same seasons, or every spring and autumn, or very commonly every winter, or once in two years. I knew one who was visited with the asthma once in seven years, six or seven times ; but it more frequently returns after no certain period. I have met with those who, after having struggled with this distemper for several years, have had an entire respite for near thirty years. Such long intervals of ease are indeed very rare : it more usually returns every year, becoming continually worse and worse. One person at very distant and uncertain periods became violently asthmatic for a single day ; during the whole of which he was in constant danger of suffocation, but afterwards, for a considerable time, would be entirely free from it. In some it never fails to be brought on in certain situations, or houses, and is not felt in others ; though at so small a distance, that it is difficult to satisfy ourselves in fixing upon the circumstance which could make the difference. There have been those who have lived with an asthma for fifty years ; and others have died of it in a few months. Some few constitutions have of themselves either out-

grown, or, assisted by some judicious methods of cure, have entirely conquered the asthma. A most dangerous asthma went off so perfectly, that after two years the patient was able to attend to business; and in another it ceased after four years. In one it came on during childhood, and often returned with such vehemence, that it was expected to be fatal; but in old age it became much gentler, and for four years ceased to be at all troublesome. It is usually, but not universally, attended with a cough, which makes no small part of the patient's sufferings. After being troublesome, together with the gout once every year for fifteen years, there came on in one patient all the signs of a broken constitution, and for five years neither gout nor asthma appeared. Wherever there is any degree of asthma, it rarely fails of showing itself just upon waking out of the first sleep. Though it be right to keep the body open in this distemper, yet a spontaneous diarrhoea is very undesirable; it not only hinders the use of many anti-asthmatic remedies, which are most of them aperient, but it shows an alarming weakness, and is often a sign of the last stage of this illness, and a forerunner of death, especially if joined with a quick pulse. The violent fits will sometimes last for several hours, and sometimes only a very few minutes. A vehement asthma, which continued for many months, became of itself gentler, and after four years was almost gone. Similar instances will sometimes occur, which render it uncertain whether relief be obtained by the efforts of nature, or by the effects of medicine.

In some a difficulty of breathing has returned periodically, like a tertian fever, and has yielded to the Peruvian bark.

Motion brings it on, and in some there is not the least sign of such a disorder, but when they move, except just at waking out of a sound sleep. The lying down in bed is particularly apt to make the breathing very laborious, and it will often be an hour or more before the lungs can tolerably do their duty in this posture; and they are relieved by sitting up, and bending the body forward. A very rare case has happened, where lying down has proved a relief.

Several asthmas cannot bear the country air, and are much more tolerable in great towns; but the far greater number are impatient of cities, and are always easiest in the country. Cold fresh air is a general relief; but I have known more than one asthma, the fits of which were moderated by sitting before as great a fire as could be borne. Sometimes any change of air is beneficial. More than once an asthma has been more tolerable in England than in warmer countries; but the contrary to this is most generally experienced. So summer is to not a few the time of their breathing with most difficulty; though winter be most generally the dangerous season. A long voyage between the East Indies and England has not relieved an asthma. In most persons, the breath is shorter and more difficult after a meal; but in a few it has been easier. A copious spitting, and a sudden oedematous swelling of the lower parts of the body, have apparently saved asthmatic persons from impending death. A violent catarrh, as from a cold, and in old persons a spitting of blood,

an inflammation of the leg and a consequent ulcer, a palsy, a pain in the stomach and limbs, cutaneous eruptions, and a fit of the gout, have all seemed to divert the mischief from the lungs ; and, though themselves diseases, have yet proved remedies to the asthma. But yet a fit of the gout has partaken of that uncertainty so remarkable in the effects of many circumstances upon asthmatic patients ; for if it have cured some, it has brought the asthma on others, or at least has not hindered a fit of it from succeeding immediately to a fit of the gout. Issues may sometimes be serviceable, but are too often useless. Emetics not unfrequently procure easy breathing ; but cathartics are so very seldom useful, as scarcely to deserve being ever tried. A large spoonful of mustard-seed taken every morning has been successful in keeping the fits off ; and so crude quicksilver, and cinnabar, are said to have been ; and yet a course of mercurial ointment has several times brought on a difficulty of breathing. Spirituous liquors, strong coffee, the smoking of tobacco, garlic, squills, and solutions of the fetid gums, afford some present ease in a fit ; and so will the opening of a vein, and the taking away a little blood : but it may be doubted whether bleeding be ever useful in any other states of an asthma, besides that of the patient's being in danger of instant suffocation : it is undoubtedly often mischievous by unnecessarily wasting the strength, and hastening the dropsy, in which an asthma usually ends. Opium is a powerful remedy in some asthmas, when all other means have failed ; is it not useful in all ?

It is observable in pulmonary consumptions, where the whole lungs are diseased, and where a great part of them has been destroyed, that patients have indeed a shortness of breath upon motion, but not any of the violent fits of suffocation which belong to asthmas ; while in examining the lungs of asthmatic persons after death, there has sometimes appeared no hurt obvious to the senses, which could account for the difficulty with which they had often performed their office. If we further consider the long intervals of breathing with perfect freedom, which this distemper frequently allows, and likewise the nature of many of its remedies, and that it will be caused by sleep, grief, anger, terror, joy, or a fit of laughter, it must seem probable, that, besides various other causes of an asthma, it is in many instances owing to some disturbance of those functions which are attributed to the nerves.

The lungs of a very asthmatic man appeared perfectly sound, and so did the heart and diaphragm : there was neither water nor pus in the thorax, nor was anything preternatural discovered, except some exostoses of the vertebræ of the thorax.

A woman had laboured with an asthma gradually increasing for eight months. She used to sit with her body bending forwards, or a little inclining to the left side, never to the right. The pulse was extremely irregular. Her legs swelled (the left more than the right), and, being punctured, a great deal of water had flowed from them. A little before her death, a fetid saliva flowed plentifully out of her mouth. She was opened, and no water was found in the abdomen

or thorax. The lungs were sound, and free from adhesions. In the aorta, auricles, and ventricles, were found rough polypose concretions, and the valves between the left auricle and left ventricle were contracted into irregular hard tuberosities.

Upon opening the thorax of an asthmatic man, the lungs continued to be inflated : their surface was full of air bubbles inclosed in a very thin membrane ; when one of these was opened, none of the others subsided. There was no other appearance of distemper about the thorax or lungs.

CHAPTER XII.

Aurium Morbi.

In children particularly, and also in grown persons, a moisture is apt to exude behind the ears, smelling offensively, and occasioning the ears and neighbouring parts to swell, and making the scarf skin come off in a branny scurf, or more deeply fretting it, so as to make the parts sore and scabby. The inside of the ear is liable to be affected in a similar manner, and with a more purulent discharge, not without some degree of deafness. The checking of this discharge by drying applications is very hurtful : nothing more needs be done, than to keep the parts clean by washing them with warm water, and, by means of a rag smeared with any mild ointment, to prevent them from sticking together, or to the clothes.

A singing of the ears may continue for several years, considerable enough to interrupt the attention by day, and the sleep by night, without either deafness or any other disorder joined with it ; but yet in several cases it is found to arise from such causes as will bring on confusion in the head, disturbed thoughts, deafness, blindness, fainting, giddiness, forgetfulness, slight deliriousness, epilepsies, palsies, and apoplexies.

Solutions of the fetid gums, opium, blisters behind the ears, valerian root, sternutatory powders, may sometimes relieve, but will not always subdue these evils.

In consequence of a violent blow upon the head or ear, I have two or three times been witness to a copious discharge of water from the ear, either clear or lightly tinged with blood, especially on holding the head down. By the account of one of these patients, there came not less than a pint every day ; but this must have been said by conjecture, for it could not easily have been measured — Whence did this come ?

A polypus may be formed in the ears as well as in the nose.

Deafness, if owing to hardened wax, will be cured by injecting an infusion of camomile flowers ; if the deafness be of a paralytic nature, blisters may be applied behind the ears, or four drops of camphor julep without sugar may be dropped into each ear, to two ounces of which there may be added half an ounce of cathartic salt ; or a snuff of asarabacca leaves may be taken every night. But these, and all

other means, which I have ever seen used, have in too many cases proved of little or no avail. If the generality of deafnesses be not incurable, a discovery of the proper remedies is one of the many desiderata in the art of healing.

CHAPTER XIII.

Of the Bath Waters.

THE difficulty of ascertaining the powers of medicines, and of distinguishing their real effects from the changes wrought in the body by other causes, must have been felt by every physician: and no aphorism of Hippocrates holds truer to this day, than that in which he laments the length of time necessary to establish medical truths, and the danger, unless the utmost caution be used, of our being misled even by experience. This observation is fully verified in the uncertainty under which we still remain in regard to the virtues of the waters of Bath. Few medicines have been more repeatedly tried under the inspection of such numerous and able judges; and yet we have had in the present age a dispute between those who by their experience and sagacity were best qualified to decide this question, in which one side asserted that paralytic patients were cured, and the other that they were killed, by the use of these waters. Such contrary decisions, so disreputable to physicians, and so perplexing to the sick, could never have happened after so long a trial, if a very small part of those whose practice had afforded them frequent opportunities of observing the effects of Bath waters, had told the public what in their judgment was to be hoped or feared from them. It is probable that in some cases it would have been almost unanimously determined they do good; in others, that they do no harm, though it might be doubtful whether they be of much use: in a third sort they would be generally condemned: and in a fourth class of diseases, some might judge them to be beneficial, and others detrimental.

Wherever the generality of voices passed either of the two first sentences upon these waters, there the use of them might be advised, or permitted, without any hesitation; and all should be cautioned against them, where a great majority agreed that they were hurtful. It would be no great loss to avoid going to Bath, in cases where the weight of evidence was so equally divided, as to make it doubtful whether the waters were a remedy, or a poison: for the probability is, that in all such disorders they are in reality insignificant, and that the patients who use them either recover by other medicines, or the strength of their constitutions, or else sink under the natural progress of their diseases. It is here taken for granted, that no chemical analysis can do much towards ascertaining the virtues of these mineral springs, but that almost all our useful knowledge of them, as medicines, must be gained from experience. Their virtues may be considered either as they are used externally, or internally.

Externally used, either by immersing the whole body, or by deriving a stream to some particular part, they appear to be serviceable against contractions and other spasmodyc affections of the muscles. In slight cutaneous disorders, warm bathing will sometimes clear the skin for a little while, but can hardly be considered as a cure. It has been a doubt with me, whether any weaknesses left by the rheumatism, gout, or palsy, have been sooner removed by bathing at Bath, than they would have been without it. In some patients these weaknesses have been manifestly increased after a course of bathing at Bath; and, according to my experience, cold bathing in these cases is preferable. It is by no means clear to me, that the external use of Bath water is more beneficial than that of equally warm common water, or at all different from it.

Internally, these springs are of singular use in remedying the morning sickness and vomiting, the loss of appetite, pains of the stomach, and other ill effects of hard drinking, where it has not been so long continued as to make the liver scirrhouſe, or to bring on a dropsy; for in both these cases they are so far from relieving, that they aggravate the patient's misery, and hasten his death. They are so generally beneficial in other disorders of the stomach and bowels, that the probability of considerable benefit will make them very well worth any one's trying, who is afflicted with indigestion, a chronical diarrhoea, hiccup, flatulency, vomiting, or any spasmodyc affections, and weaknesses, and pains of these parts, provided the pulse be in a natural state. For if there be no signs of heictical feverishness, I never had reason to suspect that Bath was prejudicial in any of these complaints, though it may have sometimes failed of being a cure. But I have never yet been able to satisfy myself, amidst the endless variety of these ailments, upon what particular circumstances it has depended, that in some it has not been attended with success.

Many judicious and experienced physicians have a favourable opinion of the internal use of Bath water in flying pains and weaknesses of the limbs, in rheumatisms, and in the simple jaundice, where the liver is not diseased. From the cases of this sort which have fallen under my observation, I should rather conclude it to be innocent in them, than of any great use. More perhaps ought to be said in its commendation in the colic of Poitou; and yet it appears difficult to find a time in this cruel disorder when we would wish to apply to Bath. During the paroxysm, while the bowels are in torture, much stronger medicines are indispensably necessary to the ease and safety of the patient: after the fit is ended, if the limbs do not become paralytic, I suppose the patient would remain well without any relapse, if the manner in which lead had been introduced into the body could be found out, and a stop be put to its ever being introduced again. For all my experience tends to make me believe, with the learned and judicious Sir George Baker, that lead is the sole cause of this distemper, though it be difficult in

many cases to trace its admission into the stomach. Some of the worst fits of this colic, from which I ever saw the patient recover, when the cause was known, and could be avoided, have, by keeping out of its reach, never returned in many years; from which it is probable there was no fomes morbi left. I have likewise observed this happen in a more chronical kind of this colic, where the limbs were become semi-paralytic; the weakness of which gradually abated, and the pains never returned, after leaving off the use of white Lisbon wine, the drinking of a pint of which every day was conjectured to have brought on this malady. Now, if the manner in which this poison insinuates itself be undiscoverable, and so cannot be guarded against, there neither Bath nor any other known means would, in my opinion, prevent the return of these torments, nor hinder them from ending in a lingering death. But it may be supposed that a person has taken so much of this poisonous metal, as may be sufficient, without any repetition, to occasion frequent fits of the colic, and to bring on at last the paralytic weakness peculiar to it; and that these bad effects may possibly be obviated by drinking the Bath waters, or that the weakness may be cured by them after it has been brought on. How much truth there is in these suppositions I know not, but I can easily allow them so much weight, as to be sufficient reasons for the use of the Bath waters in these circumstances, as they are unquestionably safe, and as I fear we are in want of other remedies upon which we might with more certainty depend. Besides, in all chronical illnesses, where these waters are innocent, there will be a good reason for any one's taking a Bath journey, who can afford it, in the benefit which he may hope to receive from the change of water, and air, from the breaking of some unhealthful habits, and from that suspension of business and cares, in which the visitors of Bath indulge themselves; all which circumstances make a place of this sort highly useful in establishing the general health.

The Bath waters have always appeared to me unquestionably prejudicial in all schirrous and ulcerous affections of the lungs, or of the abdominal viscera. They increase the hectic heat which usually attends such maladies, and speedily put an end to what little hopes might have been entertained of their cure. All patients therefore of this sort cannot be too earnestly warned against meddling with the Bath waters, if they would avoid making their condition utterly desperate; which, with the greatest care and under the best management, is always dangerous.

In extreme dejection of spirits, languor, lassitude, inattention, tremblings, catchings, faintings, giddiness, confusion of the head, and palpitations without any other apparent distemper, which are usually called hypochondriac, hysterick, or nervous; in all these whether the patients had used the water externally, or internally, I have observed them return worse from Bath; but I hardly ever knew them better, if we except only some little relief of the pains, and flatulence, and acidities, which often accompany the before-mentioned symptoms. Nor does the vacancy of a Bath life

suit complaints, which are more frequently caused by too little, than too much application and employment. It will indeed sometimes happen, that some degree of these miserable sensations will be produced by a too great weight of business; the vexations of which in some evil hour may entangle a man so much, as to disable him from extricating himself by his own struggles, unless for a while he eases himself of the load by retiring to some such place as Bath, where the manner of living will effect the cure, though the reputation of it may be put to the account of the waters. The same often happens in that languor and weakness, which are left by a long illness, and require only time and quiet for their removal.

CHAPTER XIV.

Of the Bristol Water.

THE water of Bristol is celebrated for its purity, and for its virtues in consumptions, and several weaknesses. It has certainly no claim to be thought a pure water; and as far as my experience goes, it has as little just pretence to any of the medicinal virtues which it has been thought to possess.

CHAPTER XV.

Bronchocele.

A SWELLING of the thyroïdal gland is endemic in some parts of Derbyshire, Buckinghamshire, and Surry, and is sometimes seen in persons who live in other parts of England, where this disorder is not commonly known. It chiefly affects women, and the younger part of them; and is probably the same with the Alpine swelled throat, which, though so old a distemper, has not yet been found to endanger the life, or disorder the health, or to be worth regarding on any other account than that of its deformity: though I have seen some, who have complained of its giving them, in certain situations, a difficulty of fetching their breath. The cause of this malady is most probably to be found in the peculiar nature of the water in those places where it is common; a judicious examination of which is greatly wanted. I never saw this swelling come to suppuration. A course of sea water, or of solutions of any of the neutral salts, a removal from the place, or the drinking only of the Malvern, or distilled water, appear to be the most useful means of reducing the swelling, or of preventing its return.

CHAPTER XVI.

*Calculus Urinæ.**

WOMEN are much less subject to calculous concretions than men;

* Calculi are formed in many other parts of the body. In a woman, after great pain

they do not so readily form them, and more easily get rid of them.

There is some difficulty in ascertaining both the presence of a stone, and its place. A scirrhus swelling of the prostate gland may be so easily mistaken for it, that I have known a consultation of very able and experienced practitioners, where they were divided in their opinions between these two causes of the symptoms, after every kind of examination. For a stone may be in the bladder without being felt by the catheter; of which I have seen some very remarkable instances, and particularly in one who had repeatedly been examined by three or four of the most dextrous and experienced surgeons without its ever being touched, in whose bladder, after death, a stone was found weighing 3ij. 3iij.; and the swelling of the prostate may not be large enough to put its diseased state out of all doubt; especially as it is said to be always a little fuller where the neck of the bladder has been long and frequently molested with a stone. The scirrhus of this gland is attended with an irritation to make water, and consequently with a preternatural quantity of mucus, for it always is in proportion to the degree of irritation: there are besides strangury and tenesmus; which symptoms it has in common with the stone. Bloody urine in a scirrhus of the prostate is but rarely seen, the quantity is small, and is not increased by riding as in calculous complaints. Hard feces give pain as they pass, and the testicles are apt to swell; which symptoms are also peculiar to the diseases of the prostate. But perhaps the best criterion for distinguishing these two maladies is the effect which a scirrhus has upon the general health: those afflicted with it lose their appetite, their flesh, and their strength, and have irregular shiverings, with a pulse quicker than natural, and keep constantly growing worse, without any considerable appearances of amendment, or intervals of ease: whereas the calculous patient has long respites from his pains, and shows no sign of his general health being at all affected when the fit is off: and these are also the best marks which distinguish ulcers of the kidney, or bladder, from stones. Bloody urine, without any signs of internal ulcers, especially if brought on or increased by motion, almost always denotes a stone somewhere in the urinary passages. I remember to have read in books of other causes of this appearance, which I imagine occur but seldom, because I do not recollect that I ever yet met with them.

After it is determined that there is a stone, a difficulty often remains of finding the part in which it is lodged: but this is a matter of not much importance in practice; for, except what ease may possibly be sometimes given by the cathether in pushing the stone from the neck of the bladder, there is no peculiar solvent of the stone in the bladder different from that of the kidneys; and as to present ease, nothing will procure it in either case so well as opium.

which lasted ten days, a tumor between the molars and tongue broke, and there came out a calculus as big as two peas.

It very frequently happens that there is a stone both in the kidney and bladder at the same time ; and in such cases there is no knowing to which of the causes the symptoms are to be referred. Coffee-coloured, or bloody water, without any pain, or with a dull pain, or a sharp pain, a little above either hip, most probably proceeds wholly from a stone wounding the kidneys : vomiting sometimes accompanies a nephritic pain ; but is far from being constantly joined with it : a numbness in the thigh or leg, a difficulty of bending the body, a drawing up of the testicle of the affected side, and a pain at the extremity of the urethra, are still less constant symptoms.

As far as I know, we are wholly in the dark about the particular circumstances which make the stone of the kidneys capable of exciting such torments in some, while others with kidneys totally plugged up with calculous matter are unconscious of any thing being amiss. Possibly the different sensations of people, as well as the surface and position of the stone, must be taken into the account ; for some by their feeling can trace the passage of a stone from the kidney to the bladder through the whole length of the ureter, of which others know nothing. Stones are very apt to make some stops in passing the ureter ; and wherever they do, there are made dilatations in it, several of which are commonly seen in opening the bodies of calculous persons.

When the kidney is in pain, or any of the neighbouring parts, there will necessarily be formed abundance of thick mucus, which is voided with the urine, and alarms some patients with vain apprehensions of an ulcer. A violent fit of the stone will occasion, as I have observed in dissections, a slight inflammation of the kidneys, which without any ulcer causes a purulent liquor to exude from its cavity ; and this, by its cream-like appearance at the bottom of the urine, may give juster suspicions of an ulceration. The reality of an ulcer may be principally concluded from the great quantity, from the constant flow, and particularly from the fetidness of this liquor. Ulcers of this part, as there was reason to judge, have continued for several years, and the whole kidney has been at last wasted, just as it happens with the lungs. But an ulcer only in one of the kidneys, while there is no tendency to gangrene or cancer, is far less dangerous to life than one in the lungs, and the recovery from it to tolerable health may more reasonably be hoped.

The urine of a woman deposited a great quantity of fetid mucus, which stuck to the bottom of the vessel, for ten months. After that time streaks of blood were perceived in it, without any pain, or strangury, not even from riding in a carriage. In the mean time her general health was unimpaired. Two years after, when she was with child, there came with the urine black fetid lumps, and soon after the urine appeared wholly bloody ; a hiccup came on, the woman miscarried, and died. The right kidney was filled with calculous matter, the pelvis was sphacelated and full of fetid pus ; the ureter was greatly enlarged through its whole length, and was thickened and hardened almost into a cartilage. The left kidney

also contained a stone. There was no stone found in the bladder. Hence we may collect, 1st, that such tenacious mucus, even though fetid, may be found without an ulcer; for it probably appeared in this case before the kidney had suffered any other injury than must necessarily attend its being filled with stony matter. 2dly, that a stone in the kidneys will sometimes occasion neither pain nor strangury.

The signs of a stone in the bladder are, great and frequent irritations to make water, a stoppage in the middle of making it, and a pain with heat just after it is made; a tenesmus, pain in the extremity of the urethra, incontinence or suppression of urine, together with a quiet pulse, and the health in no bad state: all which symptoms are most commonly aggravated chiefly by riding, but sometimes, though much more rarely, by walking, and bloody water will now and then be brought on by motion; yet in some few persons it happens that their sufferings from stones in the bladder, though very great, have not been perceptibly increased either by walking or riding. This I have observed in cases where the patients were afterwards cut, or opened after death, and the stones in the bladder were found to be the sole cause of their pains. The very same person will at different times be perfectly at ease in a coach, or find that the motion is intolerable. The torment arising from the stone depends more upon its figure and position, than its size; but there must be some certain situations of the largest and roughest stone, both in the kidneys and bladder, in which little or no inconvenience is felt from it. Were it otherwise, the life of a calculous patient must be one continued fit, without any intervals of ease; which is never known to happen.

It is too often seen that those, who have once shown a disposition to have the calculous matter formed in the urinary passages, continue subject to it during their whole lives; and this disposition seems also to be hereditary. But still examples occur of those who have been cut for the stone in their childhood, and afterwards have shown no signs of forming any new concretions for above fifty years; and I have known others who had felt several fits, and voided many small stones, yet, when they were opened after death, showed not the least appearance of any stony matter, or any other disorder in their kidneys or bladder. But it is suspicious, when any one has long voided small stones or sand with his urine, to have this appearance suddenly stopt for a year or two; for in this time most usually a stone will be forming, and show itself at last by its proper symptoms: in this state, it will be no superabundant caution to enter upon a course of such remedies as will be most effectual in hindering the urine from depositing any fresh calculous matter.

The largest stone that I remember having ever seen voided by a man with his urine, weighed eight-and-twenty grains; but far larger have come from women. All motion should carefully be avoided when it brings on bloody water; for a little grume of blood often forms the nucleus of a stone.

I saw a stone voided by a woman, of an oval form, whose larger circumference was six inches, and the less four inches. She was delivered of a child the next day with less pain than she had felt in parting with the stone.

The remedies against calculous complaints are either such as relieve the pain during what is called a fit of the stone, or those which dispose the urine to dissolve the stones, and so make a perfect cure. For the former purpose twenty drops of *tinctura opii*, or as much more as may be found necessary, mixed with four or five ounces of warm water, or oil, and given in a clyster, are the most effectual means which I have ever used ; and much more to be depended upon than any oily draughts or emulsions with gum dissolved in them, which however may have their use. The *uva ursi* has lately been recommended for relieving dysury of all kinds ; in my hands it has not very well answered its character ; the most remarkable effect which I ever observed from it was, that upon many repeated trials it constantly tinged one person's urine with a deep green colour ; I never could hear of its doing the same to any one else. Lime water has in many cases appeared to communicate a solvent power to the urine. I have known it used for several years as the only liquor, and by custom it became not an unpleasant one. The person who took it, from not being able to walk across his room, could bear to be carried in a coach without springs for several miles over the old rough pavement of London without making any complaints ; his urine in a few days dissolved a fragment of a calculus immersed in it, which had before been steeped in the urine of two other persons for some months without losing any part of its weight. Soap leys perhaps communicate a stronger solvent power to the urine ; but it must be owned, that neither of them do so much as is wanted ; their effect at best is very slow, and upon some stones they seem to have none at all ; for immersed in the strongest undiluted soap leys they hardly seem to waste. But still if they hinder the growth of many stones, and loosen the texture of those already formed, and dissolve, as is probable, their sharp points, which are the chief causes of pain, they must be considered as valuable medicines. I knew a person who took half an ounce of soap leys almost daily for ten years, without the least ground to surmise that it had any ill effect upon his general health. There was reason to believe that they had helped to break in pieces some of the stones in his bladder ; for he had voided some ounces of very large fragments, convex on one side and concave on the other ; and, from being quite confined to his house, became able to bear a coach, and for the last years of his life had suffered very little pain, of which he used to have frequent and very tormenting fits. But yet this long course persevered in so steadily, did not crumble them all ; for after his death one kidney was found full of stone, and there were two stones in the bladder, one of which weighed 3*vi.* 3*ii.* gr. *iv.* ; the smaller 3*vij.* gr. *xii.* It appears doubtful whether either lime water or soap leys have any power over the stone in the kidneys. It may be questioned whether it be necessary to suspend the use of these lithon-

riptics upon account of bloody urine or a fit of the stone ; for it is far from certain that they can increase the irritation by any acrimony which they communicate to the urine. However, as the fits usually last but a very few days, and time must then be found for the taking other medicines, there can be no great loss, and may be some convenience, in interrupting the course of these remedies until the fit be over. Have not too strict rules been laid down about the wholly avoiding of acids in the diet of those who take lime water or soap leys ? The power of digestion is not so well understood as to enable us to determine how long it will be before acids are changed by it so as to cease from having the effect of neutralizing alkaline substances. It is not improbable that at the distance of a very few hours they may have wholly lost their former nature. The fixed air, of which there is so much not only in the primae viæ, but in all the liquors of the body, seems at least as likely to defeat the efficacy of these solvents, by saturating them with air, and destroying their power of extricating the fixed air from the urinary calculi : and it is indeed very mysterious how this can be prevented.

CHAPTER XVII.

Capitis Dolor.

THE nature of headaches is extremely obscure. Their manifest causes are very various, and often contrary to one another. They probably therefore arise from different disorders, and some of their obscurity may be owing to their being affections of a part, the functions of which are but little understood. For they appear to be seated in the brain itself : since this pain is peculiar to the head, and there is no sensation like it in any other part of the body, but all the parts of the head except the brain are just the same with what the rest of the body consists of : dissections likewise have shown it to have arisen in some instances from diseases of the brain. The seat then of this malady, together with its long continuance and frequency of return, might make us expect that the mischief done to the general health would be great and lasting. But the contrary to this happens. The most violent headaches will frequently harass a person for the greatest part of his life, without shortening his days, or impairing his faculties, or unfitting him, when his pains are over, for any of the employments of active or contemplative life. The slightest stroke of a palsy will often be more detrimental in these respects, than headaches returning often and with great violence from childhood to the beginning of old age. Instead of their ruining the constitution, nature seems in the contest to get the better of them. I have observed in numberless instances that they almost always become milder, and generally vanish towards the decline of life. This consideration must supply the place of a remedy where every other fails ; for it is some consolation for a man to know, that if he cannot cure his distemper, he will however have a good chance to outlive it. This is true like-

wise of that headache mentioned among the diseases of the eyes, which begins with a mist before the sight.

The hemicrania, or pain of one half of the head, was very early distinguished by medical writers from the other species of headaches: but we have not yet advanced much in knowing how this differs from other pains of the head, except in the circumstance which the name denotes. It has happened that I have oftener heard of this on the left side than on the right; but I believe this to have been merely accidental. Like other headaches, it will continue to return through a person's whole life: it will attend the gout, and not be relieved by it; and it is what follows that mist before the eyes which makes a part of every object invisible. A still more narrowly limited pain than this is often complained of over the left eye, scarcely extended beyond a space which might be covered with the top of a finger. This will last a day or two, and return two or three times in a month. Is it not most common in women, and often joined with hysterical symptoms? Some pains seize upon the back, others upon the fore part only of the head. There may be other varieties of the place affected, which it is hardly worth while to remark, unless more use, than I know, could be made of them in discovering their nature, and directing us to the cure. I say nothing of venereal headaches, which are distinguishable by their being chiefly troublesome at night, and by being joined with other symptoms of this distemper, and by yielding to its proper remedies.

Spring or autumn, or both, are the times when some headaches constantly return; others are sure to be felt just after sleeping. A few are most troublesome in summer, but more in winter. Of far the greatest number of headaches it is true that they are indifferent to all seasons; and their returns are totally irregular, and not to be reduced to any rule: and so is the duration of the pain, which may last a few hours, or a day, or a week, or not cease entirely for many years. Some great change in the constitution has removed a headache which had continued from infancy. It has ceased upon the coming on of an asthma; and there have been many instances of its leaving women during every pregnancy, who were hardly ever free from it at any other time.

Disagreeable as this pain is, it is not the whole which is felt by all those who suffer it. Giddiness will in some precede a fit, but this has more frequently joined itself to an old headache. Confusion of vision, flashes of light, the darkening or colouring of objects, stupor, and tightness of the head, are the certain companions of many headaches; and so are all sorts of hysterical symptoms, such as shiverings, cold sweats, fainting, coldness of the feet, numbnesses, lethargic heaviness, noises in the head, loss of voice and sight for a short time, catchings, convulsions, light-headedness. The intenseness of the pain will sometimes leave a soreness of the head for a day. Great disorders also of the stomach are sometimes united with headaches, such as flatulence, a sense of fulness, uneasiness, pain, heartburn, sickness, vomiting, diarrhoea, and worms: in very many patients these two parts suffer alternately; whenever the head is well, the

stomach is uneasy, and *vice versa*. This view of the complaints which are often connected with headaches, makes it probable that the head is not always primarily affected, but sometimes suffers by sympathy with the stomach, which is the original seat of the malady. The healing of old sores, and of other cutaneous distempers, and the menstrual irregularity of women, more frequently affect the stomach first, and the head perhaps chiefly from its consent with the stomach.

Very few headaches are attended with danger; but where there is any, it is found where the most and the strongest of these symptoms appear (such as stupor, swelling of the neck, deliriousness, and convulsions), which belong to epilepsies, lethargies, palsies, and apoplexies, into which headaches, though rarely, have been manifestly continued. But a headache is so common a distemper, and a palsy so far from being an uncommon one, and yet the one succeeds the other so seldom, that the same person who had been accustomed to the former, may happen to have the latter, without affording sufficient reason to convince us that they had any connexion with one another. Some of these fatal headaches, as I have had opportunities of knowing, have been occasioned by unnatural collections of liquor, or imperfect suppurations, or morbid masses formed in the brain, which had first occasioned the pain, and afterwards by the increase of the compression upon the origin of the nerves, had at last made them incapable of performing any of their duties. Many similar cases may be found in authors, which I forbear to quote, as I propose to confine myself wholly to the mention of what has occurred in my own practice, that these remarks may have the merit of being copied immediately from nature, to make up for their other defects.

Among the more tractable headaches, the same means, for no obvious reason, have had such opposite effects in relieving and exasperating similar pains, that it must be left to more enlightened posterity to lay down a certain method of cure; it not being always easy at present to satisfy ourselves in determining which is the most probable. Anxiety and perturbation of spirits, noise, fatigue of mind or body, too much light, the air of a room heated by a crowd of people, indigestion, and the acts of sneezing and coughing, have almost a certain and universal effect of making headaches worse. Eructations upon the skin, eating, sleep, the heat of a fire, summer, winter, a cold, or hot climate, a fit of the gout, and the outward air, have had very different effects upon different patients; but the greatest number hath been benefitted by sleep, warmth, summer, hot climates, the outward air, and eruptions appearing on the skin. If cold bathing, bleeding by leeches, or by opening a vein or artery, perpetual blisters, issues, and sneezing powders, have done no harm (of which they have been suspected), they have, however, in many cases, undoubtedly been useless, and so have warm bathing, nervous medicines and opium. Though every known remedy for headaches have at times failed, yet among those which have seldomest disappointed my expectations, I find a perpetual blister to the head, the taking away of six ounces of blood by cupping upon the shoulders

once in six weeks, and pills made of one grain of aloes and either four grains of columbo-root, or half a scruple of pulv. myrrh. comp., taken every night. Emetics are often highly serviceable ; the strain to vomit aggravates the pain much less than might be feared, and they have been repeated every month with success ; nor is it unusual for a spontaneous vomiting to cure a headache. The pain of the head, so common in the beginning of fevers, is much relieved by it; but for this particular headache, a blister between the shoulders may be recommended as a specific. Warm fomentations of the head, or feet, often give present ease ; and tinctura opii has been useful for the same purpose.

CHAPTER XVIII.

Capitis Dolores intermittentes.

THE Peruvian bark affords a remedy which seldom fails of curing periodical fevers, in which the whole body seems to be affected ; but in periodical pains which seize only some part, both this bark, and every other medicine that I know, often prove ineffectual. This is the more to be regretted, because when such a topical intermittent infests the head or face, as it often does, there is as exquisite an anguish suffered, as from any distemper to which the body is subject, if we may judge by the expressions of it, which are wrung from the most patient tempers.

The seat of these pains will be the whole head, as in a common headache, or only the hind part, or the forehead ; very frequently they will be felt only on one side of the face ; and though I have known them on both sides, and in the same person in different fits, yet they have been much more frequently on the left. During the fit, the upper lip, the gums, the cheek, and temporal muscle, will be in such an agony, as to make it impossible to speak, to chew, or to swallow ; sometimes only one of these parts will be affected. The mouth is filled with saliva, the eye waters extremely, and cannot bear the light ; the eyelids will be swelled and red, and I have twice seen them black and blue, from the violence of the pain in every fit. A heat of the face, and redness, with an unusual flow of spittle, have been its forerunners ; and in some it has been attended with vomiting, and little spasms, or tremors of the parts affected. The fits have ended in one hour, and have lasted several, and even two days, and have kept their periods as regular as any common quotidian or tertian : they have also returned every ten days, and once a month, or twice a year ; but there is usually great irregularity in the times of their returning. In some unhappy subjects, this disorder, from being intermittent, becomes almost continual ; for the slightest attempt to eat, or speak, the motion of a carriage, or a blast of cold air, will bring on the pain, so that for a considerable number of years they are scarcely ever entirely free from it. Both sexes are subject to it, but women much the most so ; and it has spared no age, from childhood

to the eightieth year of life. Sometimes a stupor has hung on for some hours after the ceasing of the fit ; but in the intervals of the paroxysms the patients are most usually free from all complaints.

In the attempts to cure this malady, evacuations have proved not only useless, but hurtful ; and bleeding in particular has been very detrimental. Cataplasms have not been well borne, and have rather added to the misery of the patients. The Peruvian bark has very often been tried in vain, and so have the root of valerian, the fetid gums, myrrh, musk, camphor, opium, extract of hemlock, sneezing powders, blisters, deep caustics, electrifying, fomentations made of a decoction of hemlock, warm pediluvia, epitheins of ether, anodyne balsam, sp. vini, linimentum, saponaceum, and oil of amber, opening the temporal artery, and drawing some of the teeth ; nor has a supervening fit of the gout made any alteration in this obstinate ailment. But still the bark has now and then succeeded, and not so seldom but that it is advisable to recommend it in the first place ; an ounce of it, or not much less, should be given every day for a week. Blisters behind the ears have appeared to abate the violence of the fits ; and instances have not been wanting of the good effect of as much extract. cicutæ given daily as could be borne without giddiness. In some cases, where everything else has failed, a draught with one quarter of a grain of emetic tartar and forty drops of tincture of opium, taken at bed-time for six nights, has made a lasting cure. Cold bathing has also been used with benefit. If the patient be unable to swallow the bark, or very averse from taking it, six ounces of a strong decoction with a quarter of an ounce of the powder may be given in a clyster, to which, if there be occasion, tinct. opii may commodiously be added.

CHAPTER XIX.

Carbuncle

Is a large red tumour, usually appearing in the back, with a spongy base, loaded with a purulent liquor, oozing out plentifully at any cracks or openings which it finds. Soon after the tumour begins, there comes on a considerable degree of fever, with great inquietude, and loss of strength, of appetite, sleep, and flesh ; so that it has many marks of being the cause or effect of some extraordinary derangement of the health. Old persons and shattered constitutions are the usual subjects of this malady. The notion of its being commonly attended with a diabetes, has by no means been confirmed by my experience. In some cases, I have remarked only the usual quantity of urine, and that generally with a sediment ; and in one there was a total suppression of it for two days before the patient's death. Among those carbuncles which I have seen, several have proved fatal. As much bark should be given as the patient can take without loathing ; and as much of an opiate as the inquietude and want of sleep may require.

CHAPTER XX.

Chorea Sancti Viti.

THE subjects of St. Vitus's dance are chiefly children from the age of ten to fifteen years, it has come on so early as the sixth year, and so late as in the twentieth. Among the patients whom I have attended, there have been four times as many girls as boys. Their legs and arms are agitated involuntarily, but the arms more than the legs ; and it is in a very imperfect and awkward manner that they perform any spontaneous motion. One side usually suffers more than the other, as in the hemiplegia ; but the disease does not always keep constantly in the same person to the same side. Some weakness, and cramps, and such slight symptoms of it, have usually been observed for some little time, and they have been known to continue for several months before the distemper was fully formed : it has also been brought on suddenly by convulsions : in many it has been preceded by a stiffness and pains of the knees. The tongue is so much affected, that none of these patients can speak plainly : several can hardly speak intelligibly, and some wholly lose all power of speaking at all. A boy had his legs so violently agitated, that the involuntary motions overpowered all the weaker efforts of his will to move them ; but a stronger exertion of the power which excites spontaneous motions was able to control his distempered agitations, so that he could run, but could not walk : the same is observable in men intoxicated to a certain degree with strong liquors.

This singular species of convulsions is accompanied with giddiness, numbnesses, uneasiness of the stomach, disturbed sleep, and wasting of the flesh, though without much loss of appetite ; and for a time the understanding and temper become more childish. This malady is hardly ever fatal to the patients ; but is seldom removed in less than a month, and often resists all remedies for two or three, and has been known to last a year. A relapse is uncommon ; yet in some few, after they have seemingly recovered from this disease, there has been felt a little tendency to it every spring and autumn for three or four years. A violent affection of the mind has also made some symptoms of it return, so that slight traces of the agitations have been perceived for ten years ; if they were not rather hysterical, or paralytic complaints, to which St. Vitus's dance is nearly allied.

Nor does it seem more allied to them by the appearance of its symptoms, than by the cure which it requires. Bleeding, and purging, and violent medicines, can hardly be judged proper for a distemper attended with no inflammation, nor heat, and particularly incident to a very tender age, and to the weaker sex ; and which, if left entirely to itself, would, I believe, generally cease spontaneously, and leave the constitution unhurt. This reasoning appears to me to have been justified by fact and experience. Where they have been used, I never saw any good effects from them, and rather suspect that they have done mischief. *Pulv. myrrhæ comp. gr. v.,*

pil. opii gr. ij., made into two pills to be taken at bed-time every night, eccoprotics used occasionally, so as just to prevent costiveness, and a cup of any mild bitter infusion taken once or twice a day, is the method which has succeeded best with me: to which, when the patients begin to recover, the cold bath may be advantageously joined, in order more expeditiously and perfectly to restore their strength. I have known it borne extremely well in the very worst state of this malady.

CHAPTER XXI.

Coxæ Morbus et Exulceratio.

THERE is a disease near the hip very different from the sciatica, or rheumatism, of that part; and though less painful, it occasions greater lameness, and is far more dangerous. It is seated in the joint of the thigh, and is attended with a remarkable pain in the knee, but with scarcely any in the part affected, even after the swelling is become very great, and a fluctuation of matter is perceivable. The thigh wastes, and the foot of that side is unable to support any share of the weight of the body. The patients sometimes die hectic, and wasted, before the swelling either breaks or is opened, but more commonly the ulcer of the joint makes a way for the purulent matter to discharge itself outwardly: yet this seldom saves their lives, and never prevents their lameness.

This disease will in some go on increasing for three years before it becomes fatal. It is chiefly found from the sixth to the sixteenth year, during which time of life the joints and external parts of the body suffer most from scrofulous complaints; which, after this age, seem to be turned upon the lungs, or abdominal viscera. The hip-evil evidently belongs to the scrofula; and other scrofulous appearances are often joined with it. The Peruvian bark, and cicuta, opium, and eccoprotics, make up the whole of the medicines, which either aim at the cure, or can occasionally relieve this most difficult and dangerous distemper.

CHAPTER XXII.

Crurum Dolor, Tumor, Inflammatio, et Ulcus.

BESIDE rheumatic and arthritic pains, with consequent weakness, almost to a loss of their use, which the legs suffer in common with other parts of the body, they are peculiarly subject to oedematous swellings without any pain; secondly to a sharp humour, which swells and thickens, and hardens the skin, with an intolerable itching; which sharp humour oozes out copiously through cracks, where the skin has either burst, or has been torn by rubbing and scratching to allay the violence of the itching: thirdly, to erysipelatous inflammations with great pain, which return upon some persons once

or twice every year, being preceded by shiverings and a hot fit, like an ague. This inflammation continues troublesome for several days at least, and will often end in an obstinate and ill-conditioned ulcer, which no art can heal for many years.

These disorders are not always owing to internal causes, but have sometimes appeared in consequence of external hurts of the legs, by which they have been weakened, or otherwise injured. Women are far more subject to all these diseases of the legs than men (except perhaps that erysipelatous inflammation, which lasts only a few days or weeks). Healthy young women will often have their legs swell œdematosly, especially in hot weather, which never happens to the young and healthy of the other sex. Pregnancy rarely fails to occasion this sort of swelling. A redness of the whole leg, with the skin thickened and hardened, and itching insufferably, with a great discharge of a sharp water, is very common among women after their fortieth year, remaining incurable for several years; with which complaints fewer men are molested; and the same may be said of ulcers of the legs.

If then these swellings and inflammations, and ulcers, be almost peculiar to the legs, and chiefly incident to those, who from their age, or sex, or accidental hurts, may reasonably be supposed to have less firmness either in the textures of their whole bodies, or of this particular part, it should seem a right practice to add an additional strength by bandages and straight stockings: and how safely this may be done appears from the total vanishing of the tumour by a horizontal posture, without any apparent injury to the health; and from the ready healing of the inflammations and ulcers in many cases, where they were probably occasioned by weakness.

But it undoubtedly happens that the morbid quantity, or quality of the humours, are no uncommon causes of the swellings and sores, which therefore cannot safely be repelled by violent means. An asthma, probably arising from water in the breast, which threatened every moment to be fatal, has immediately taken a more favourable turn as soon as the lower parts of the body began to swell; and a sense of internal heats, with many disorders of the stomach, and other parts, have found as great relief by the formation of an ulcer in the leg; on the other hand, the healing of an ulcer in this part, has been followed by headaches, giddiness, numbness, shortnesses of breath, loss of appetite, and pains of the stomach and bowels. A due attention to the present habit of the patient's body, and to his former state of health, will afford the best direction to the physician's judgment in deciding, whether it be safe to cure these disorders, or necessary to let the present evil remain, in order to prevent a greater.

The Rochelle, or any other of the purging salts, given twice or three times a week, so as to purge not more than thrice: two scruples of the Peruvian bark taken every day at any convenient hour; and, if there be occasion for any thing further, a quarter or a third or part or half a grain of calcined mercury, with a scruple of crude

antimony swallowed every night, or every other night, will perhaps answer all the purposes of evacuating and correcting the morbid humours. They may be continued, if they be so long wanted, for two or three months. An issue above the knee has been judged to contribute sometimes to the cure or prevention of an ulcer in the leg; and in other cases it has been useless.

CHAPTER XXIII.

Cutis Vitia.

THERE is a great variety of cutaneous disorders. The several discolourings of the skin, brown, yellow, black, and blue, hardly deserve to be reckoned among its diseases, where they neither rise above the level of the other parts, nor are attended with any unusual sensations. It may however be worth the mentioning, that I have seen some children with little purple spots, like the purples in bad fevers, all over their bodies, except that in some places there were larger patches of them as broad as the palm of the hand, unaccompanied with fever or any other alteration of their health, which after a few days spontaneously vanished.* In old people, blue spots, about a quarter of an inch broad, are not uncommon.

Small pimples frequently rise, and soon die away without spreading; but they sometimes spread into a branny, or scaly blotch, or turn to a thick crust, cracking in various places; whence a water oozes out, with which the legs and face, and more rarely the whole body, are covered, with equal deformity and inconvenience. Erruptions, or risings above the skin, are red, or of the same colour with the skin, moist or dry, watery or purulent, smarting or itching, and sometimes without either. The nails too will become rough and thick and scaly. Pustules will arise so large as to approach the size of biles, which they resemble. A heap of small watery pimples, after they have broken, have been known to leave a speck of blood, like the point of a pin, with itching and swelling.

Several of the appearances here mentioned have been distinguished among the ancient physicians by peculiar names: there is great difficulty, though happily not much use, in ascertaining the appearances to which these names were appropriated; for this reason the ancient divisions and titles of cutaneous diseases are very little regarded by the moderns. Almost all affections of the skin, which have no other name, are vulgarly, with great impropriety, called the scurvy. Of the true scurvy and leprosy I can say nothing, as they have never occurred in my practice; beside these, the itch, shingles, and scald-head, are perhaps the only chronical cutaneous ailments, for which we have names, in which all are agreed.

Several of these maladies are hereditary: and even where they are not derived from the parents, they may still be the effects of a general disorder of the body, rather than merely local, and belong-

* See chapter lxxviii.

ing only to the skin. Cutaneous ailments, brought by some children with them into the world, have continued with very little interruption to the end of a long life. After the measles and small-pox, disorders of the skin will make their appearance in some, who never had any of them before: it remains a doubt, whether they have been formed by some mischief arising from these diseases, or whether they have only been excited from latent seeds pre-existing in the body; or lastly, whether their appearance at that time be not wholly casual: since it happens more seldom, than it probably would, if the small-pox and measles had a natural tendency either to breed any disease in the skin, or to nourish them.

The spring of the year is the season in which they are most apt to appear, or to grow worse; and next to this may be reckoned the autumn; but this is by no means constant. There is still much greater uncertainty with regard to summer and winter; so that it is hard to say whether more diseases of the skin be exasperated, or relieved, by either of them. The warmth of a bed, and of a fire, has made some spots of the skin retreat, which never failed to reappear in proportion as the body was cooled; the contrary to this has been experienced in several instances, and perhaps in more.

A moisture behind the ears is common in children; and this, whether from neglect of keeping the part clean, or from the abundance and sharpness of the humour, will sometimes spread all over the head and face. The branny scurf, which is often observed in several patches all over the body, is very apt to begin at the point of the elbow. A violent itching of the skin without any eruption is familiar to the jaundice, and adds sometimes to the discomforts of old age.* Several women have had a pimple appear on their noses, which has been succeeded by a thick scab, covering, by degrees, the nose, face, and neck; and has for many years eluded every method of cure which a variety of physicians was able to suggest. This appearance is much less common, though not altogether unknown, in the other sex. A branny scurf in various parts of the skin, and particularly in the head, has infested some through their whole lives.

There seems to be very little if any contagion in cutaneous disorders, if we except the itch and scald head. A woman, who had for five years had broad branny eruptions, suckled a child whose skin remained perfectly clear from any disorder. The itch is well known to be very infectious; but there is an appearance exactly like it, and which could be traced up to its having been received from an infected person, and yet differs from the true psora by being very little, if at all infectious, by its resisting all the usual remedies, and by its returning frequently for many years. While the ears are swelled and red with a great watery discharge from behind them, it is very common for the lymphatic glands to be swelled, as they often are for a few days after a considerable discharge has been procured from the neighbouring parts by a blister.

Many morbid appearances of the skin are judged to be proofs of

* See afterwards chapter lxxvi.

a diseased constitution, rather than merely local disorders of the part which is afflicted with them ; yet in some instances a hurt of the skin by a bruise or a burn has been the cause of a general mischief ; so that in consequence of such an accident a clear habit of body has in an advanced age of life shown all the marks of what is vulgarly called a scorbutic or even strumous taint. There are also other instances where cutaneous maladies, instead of relieving, have always hurt the general health, never failing to be accompanied with headaches and languors, which increased and decreased with the eruptions. Such cases however are rare ; and the reverse is much oftener met with, where some general ail of the body throws itself off in blotches and deformities of the skin ; so that when these retreat of themselves, or are repelled, the patient will complain of headaches, giddiness, lowness of spirits, want of sleep, cough, want of appetite, heart-burn, flatulence, sickness, pains of the stomach, wandering pains, feverishness, and wasting of the flesh. It is a doubt, whether some asthmatic, consumptive, and paralytic complaints, have been the effect of cutaneous distempers ceasing to appear, or whether both of them have been owing to some common cause ; for it has been not improbable, that some fatal mischief arising from other causes had so weakened the powers of life, that nature was unable to free herself any longer from that incumbrance which she used to throw off upon the skin.

The moisture so common behind the ears of children, during the first four years of their lives, requires only to have the parts kept clean with a little warm water, and to be hindered from growing together by means of a fine rag smeared with any mild ointment ; but all further application should be avoided, as having been sometimes attended with convulsive fits, shortness of breath, and other bad consequences ; whereas none need be feared from suffering the disorder to take its own course, and from trusting to its curing itself, as soon as it is for the patient's benefit that it should be cured. Where mischief has ensued from repelling these eruptions in children by violent means, a slight anointing of the parts, which had been affected, with the blister ointment, will be an useful method of recalling them.

In adults there is usually less danger, than difficulty, in freeing the skin from the several blemishes to which it is liable. There are too many so deeply rooted in the constitution, as to elude all the known external and internal remedies ; and they are often supposed to be cured when they are not ; for it is hard to determine whether they have yielded to the remedies, or have spontaneously retreated ; which they have been known to do, and to be latent for above twenty years, after which they have returned with unabated vigour ; plainly showing that the cause had been neither subdued nor weakened. Where the perspiration is great, and confined, as in the groin, under the breasts of women, and in the necks and other parts of very fat children, it is apt to grow acrid, and to fret the parts on which it lies ; the frequent washing of them, and the use of any soft oint-

ment to prevent their rubbing against one another, will prove effectual remedies. During pregnancy many obstinate cutaneous maladies have been known to disappear spontaneously, which had long resisted all the usual medicines; but after delivery they have returned in their former manner. There has been reason to believe that issues and blisters have in several instances proved useful drains to those morbid humours which made the skin foul and unsightly; but in others no benefit has seemed to arise from them.

With regard to external applications, it is an useful general rule to employ acrid washes and unguents, where the diseased skin is accompanied with itching; but where it is attended with soreness and pain, to use such mild ones as may mitigate rather than increase the smart; otherwise, troublesome and even dangerous inflammations might be brought on. Water is the gentlest of all external remedies, whether it be made a cold or warm bath, or applied in fomentation and vapour. It dilutes and weakens any sharp moisture which, by fretting the skin, may increase the evil; and by suppleing the scales and crusts, makes them more easily thrown off. Salt, sulphur, and various herbs, are sometimes added to improve its deterersive powers; hence the sea water, and many natural springs, are judged more efficacious than plain water. Preparations of lead, though void of all acrimony, are in such general esteem as external cutaneous remedies, that they are not only used to the disorders attended with heat and some degree of pain, but also to such as only itch, or are perfectly indolent. Extracts of lead made with vinegar, ceruse, and sugar of lead, formed into washes, ointments, and plasters, are all in frequent use; and it is not easy, from any experience which I have had of them, to say which of these preparations is preferable to the others. The tar ointment may likewise be applied not only to such blotches as itch, but even to those where there are cracks and moist sores, without any fear of increasing the pain in most cases; but in a few instances it has been known to dry, and create pain. Sulphur has a specific virtue in curing one distemper of the skin, and there are few others in which it has not been tried externally and internally. The success, whatever it may have been, has by no means been so great as to hinder our doubting whether it have any, except in curing the itch. The seeds of staves-acre, and the root of white hellebore, are both extremely acrid, and require so much caution and accuracy in the dose, that they have very rarely been ventured upon as internal medicines; but when applied outwardly, they are safe and effectual in a degree, which may make it probable that, besides their acrimony, they have some specific powers in clearing the skin from foulnesses. One grain of white hellebore may be safely given internally, but I know nothing of the internal use of staves-acre: half an ounce of the seeds of staves-acre, powdered, may be infused in half a pint of boiling water, to which, after it is cold, should be added as much brandy, and the parts affected are to be washed morning and night with the strained liquor. A lotion, applicable in the same manner, may be made by pouring

twenty ounces of boiling water upon four or six drams of the powder of white hellebore root, and by adding to the strained liquor four ounces of the tincture of the same root. The only ill effects of which I am aware from these lotions is the pain and constant inflammation which they may occasion ; this will easily be remedied by lowering them with more water, till the heat and pain become moderate. There is such a difference of soundness and freshness in different parcels of these drugs, that there is no other way of exactly proportioning the quantity of water but by some help from trial ; not to mention the various degrees of sensibility which is to be found in the skins of different persons. They may also be used in ointments, by mixing them with four times their quantity of simple ointment. Pepper, and many other acrimonious simples, have a place likewise among cutaneous remedies : upon this account cantharides in ointments and plasters have been used to clear the skin from its diseases ; but I have not been witness to their virtues for this purpose often enough to be sufficiently acquainted with them. Solutions of alum, and of vitriol, will allay a troublesome itching of the skin which comes without an eruption, and will also destroy the half-dead scales, and clear the skin from several blemishes. The strength of these solutions must be limited by the pain and inflammation which they occasion : while these are slight, they can never be too strong. The same rule holds with regard to all the other acrimonious remedies for the skin.

Quicksilver, besides the corrosiveness of its preparations, appears to have some peculiar powers in destroying the causes of some cutaneous maladies. Crude quicksilver, which is perfectly mild to the touch, when divided with any tenacious substance, and applied in ointments and plasters, has been found considerably efficacious in cleansing the skin from many foulnesses. The chemical preparations of it add greatly to its powers, by the degree of acrimony which they possess. The neatest of all these, but at the same time the most violent, is the corrosive sublimate, because it perfectly dissolves in water, or spirits of wine, and has neither colour nor smell. The others, being indissoluble in water, must be applied in unguents and plasters. It must always be remembered, that besides the caution necessary to prevent pain and inflammation from the more acrimonious preparations of mercury, there is another thing to be attended to in the use of all of them, which is, not to employ them in so large a quantity as to occasion their peculiar effect of salivating. One dram of corrosive sublimate will generally be sufficient for a pint of water ; half an ounce is much too large a quantity ; and I have known great pain and swelling ensue from washing a very small portion of the skin with so strong a mercurial lotion. The corrosive sublimate should be dissolved in pure water preferably to lime water, which only weakens it, and gives it a disagreeable yellow colour. With regard to the probability of exciting a salivation, there will be a great difference, arising from the largeness of the surface of the body to which the mercurial medicine is

applied. A very weak preparation spread over a large portion of the body, would be much more likely to raise a salivation, than a much stronger which covered only a small part of it. The unguentum hydrargyri nitrati has been anointed over the whole face every day for many days together, without any complaints either of present pain, or consequent salivation. How innocent a mercurial ointment may be made with one dram of the calx hydrargyri alba and one ounce, or half an ounce, of simple ointment, may be judged from the free use which is safely made in surgery of that stronger preparation, mercurius nitratus ruber. Magistery of bismuth, and flowers of zinc, either sprinkled upon the skin, or formed into an ointment, are rather cosmetic, than remedies for any harm considerable enough to be called a distemper.

The internal medicines are either such as evacuate the diseased tumours or correct them. Strong purges are improper for the first of these purposes, and will sooner exhaust the patient's strength than expel the cause of the distemper. A long continuance of the gentler purgatives is best calculated to suit the obstinate nature of the diseases of the skin. The experience of mankind seems to have settled in preferring the purging salts as the most safe and commodious medicines of this class. They neither pall the stomach, nor require confinement; and are so far from impairing the strength, that weakly persons have grown fatter and stronger during a twelve-months daily use of sea water. Whether they are best taken in sea water, or the natural solutions of various springs, or the artificial solutions in common water, and which of the neutral purging salts is the most friendly to the body, and most powerful against the distemper, all this seems to remain undecided by any experience with which I am acquainted. They should not be given in such a dose as to purge above twice, and during their use frequent attention should be given to the state of the patient's strength and flesh; for if these begin to be impaired, the purging ought to be laid aside.

A great variety of internal remedies for correcting the unhealthy humours which show themselves upon the skin, are to be found in all practical books of physic. Among all these the Peruvian bark and mercurial preparations have appeared to me to do the most good. In the less urgent cases a dram of the powder of the bark must be taken once a day, or two scruples twice a day, for several months; and I know it may be taken for a very long time with great advantage to the general health, besides its virtues in clearing the skin. There has been very great reason to believe that it has mended the appetite and digestion, and prevented catarrhs. In more violent disorders, a quarter of a grain of calcined mercury has been given every day for three or four months with safety and benefit. A solution of corrosive sublimate, containing half a quarter of a grain, may be used in the same manner. This method of cure has, as far as I could judge, proved the most successful; but it will happen, I fear, to all the known methods, that they will be found too weak to subdue the obstinacy of some inveterate cutaneous diseases.

The herpes, or shingles, has begun with a pain which has lasted in some for two or three days before the eruption appeared. It consists of a heap of watery bladders, itching at first, of which there are sometimes so many as nearly to surround the body, whence it has its name of shingles, from *cingulum*. This eruption is now and then attended with a fever. The bladders should be opened, and the sharp serum let out, after which the parts may be covered with a soft cerate, to defend them from the rubbing of the clothes, for they are sometimes very painful. It seldom happens that these little blisters turn to obstinate sores, though in old persons, and in bad constitutions, it will be several days before they are quite healed. But the greatest part of the misery is many times to come after they are perfectly well, and the skin has recovered its natural appearance ; for I have known a most pungent burning pain left in the part, which has teased the patient for several months, or even for two or three years ; nor have I found that any soothing or opiate application ever gave much relief. The uneasy sensation which succeeds the herpes has in some arisen only to a torpid feel. In one person, in whom the herpes had broken out near the collar bone and shoulder, such an exquisite tenderness was left, that he dreaded to move his arm, and could hardly bear the application of anything to the part, though made with the lightest feather : he was obliged to cover himself only with a loose gown, having, when I saw him, been unable for two or three years to put on a coat. However, this was the only instance in which I ever knew the pain rage with such extraordinary violence.

In a woman more than fifty years old the herpes appeared upon the right clavicle, together with fever, and pains throughout the whole right arm. The eruption and fever continued some weeks ; but the skin remained scaly for several months, and the whole arm became gradually weaker, till it lost all power of spontaneous motion ; and in this state it continued at least for three years, and probably for her whole life. The fingers were constantly in an involuntary tremor.

The porrigo, or scald head, begins with little spots of a branny scurf, which itch and grow bald ; these gradually become larger and more numerous, till they cover the whole head, the skin of which will be sometimes so deeply affected with the humour as to be full of moist sores or scabs. Children are more subject to this complaint than adults, and boys more than girls. Among grown persons, I have seen several women labouring under this complaint, and but few men. It is an infectious distemper, and readily communicable where children use the same combs, or pillows, or put the same covering on their heads with the infected person, or hold their heads close to his ; but when all these circumstances are cautiously avoided, I have known children live and play together in the same house, and yet one who had a scald head did not give it to the rest.

In some constitutions it seems as if certain diseased humours were thrown out and appeared in the form of a scald head ; so that a cough has immediately ceased upon its coming on, and when it re-

treated the breathing has become short and laborious. . A species of this disorder has broken out during the infancy of some women, and has continued upon them to old age without yielding to any medicines. There is no little difficulty in curing it, in children, though it may have been recently contracted; and every one must have heard of such who have been under very skilful management for two or three years without the desired success.

The best method, which I know, is to cut off the hair where the distemper has spread over a great part of the head, and to keep it anointed with the tar ointment, covering it with a hog's bladder. If it heal by means of this application, as it often does, though it may be two or three months before it be well, I then recommend the head to be wetted morning and evening with the infusion of white hellebore root above mentioned, as long as any tendency to scurf is seen. If there should be any part of the head where the skin is more deeply diseased so as to form a sore, one dram of the calx hydrargyri alba mixed with half an ounce of a soft cerate makes an useful ointment, some of which spread upon a piece of thin leather may be applied, and renewed as often as it grows too dry to stick on any longer. Where a healthy person has manifestly contracted this distemper from others, I know of no want of any internal medicines.

The scabies, psora, or itch, appears most commonly like very small watery pimples, but sometimes resembles the smaller variolous pustules, having a red base, and being filled with a yellow matter. Both these appearances are attended with excessive itching, and are found chiefly about the joints, and particularly between the fingers; but very remarkably spare the face; so that I am not sure that I ever saw the least marks of it there, though once or twice I have been in doubt whether the face has not some little share of it. No distemper is more infectious than this: but it has before been mentioned, that there is a species of it, which was at first catched by infection, and though seemingly cured by the proper remedies, yet will continue to return once or twice every year, without being contagious even to those who lie in the same bed, and without retreating at all the sooner from the application of any of the usual remedies.

The itch has been imputed to certain animalcules. I was told by that very dextrous experimenter, and accurate observer, the late Mr. Canton, that he had looked for them, but had never been able to satisfy himself that there were any. I have heard the same from Mr. Henry Baker, whose well-known treatise upon the microscope shows that no one was better skilled in its use.

It is observable, that of infectious distempers, some, like the small-pox or measles, can be had but once; or very seldom oftener, as the malignant sore throat, and hooping-cough; or only in particular circumstances, or certain constitutions of the air, as the dysentery, camp-fever, and plague: but the itch and the Venereal distemper are very generally communicable at all times to all persons who come in the way of their contagion. It is not easy to say what would have been the state of mankind, if out of the three specifics with which

Providence has blessed us, two of them had not opposed the universal infection with which these two disorders would otherwise have overspread the whole world.

There is a vulgar notion in some countries, that the itch is wholesome, and that there is danger in curing it too soon : this is almost too ridiculous to be mentioned ; and yet I believe there is as much foundation for it, as for that more respectable, because more general, notion of the wholesomeness of the gout. The remedies for this distemper are in the first place sulphur, which has a specific or peculiar power of curing it, and is always safe, and can never be applied too soon, and therefore is preferable to all others ; but it is often objected to on account of its smell, and of its being less neat than other remedies. The most common way of using it is by mixing one part of flowers of sulphur with four parts of lard, and anointing the parts once every twenty-four hours. A cure is by these means usually effected in about ten days. A shirt being lightly sprinkled with the flowers of sulphur is said to be equally effectual ; and the late Mr. Cheselden told me, that the distemper would be cured if the feet only were anointed, without applying the ointment to any other parts of the body which have suffered from the itch.

Crude quicksilver seems also to possess some specific powers ; for if it be divided by white of egg, or any tenacious substance, and soaked up by flannel, or if the unguentum hydrargyri be spread upon linen or leather, and worn round the body in the form of a girdle, this application will frequently be successful. And yet, what is very extraordinary, it is not uncommon for persons to rise from a salivation, uncured of the itch, notwithstanding their having been constantly daubed with the mercurial ointment for a month or six weeks. It is doubtful whether the chemical preparations of mercury prove remedies on account of any specific virtue, or merely from their corrosiveness, which reduces these little foul sores to a state of healing, just as any other ill-conditioned ulcer is brought on to heal by similar means. The neatest of all these preparations is a solution of one dram, or at most two drams, of corrosive sublimate in one pint of pure water, with which the distempered parts may frequently be wetted. One dram of white precipitate mixed with four times its quantity of ointment, makes also a safe, and not an offensive medicine, which may be applied every night. Some persons have complained of lowness of spirits, pains of the bowels, and wandering pains, after being cured by the help of these girdles, washes, and ointments, which they laid to the charge of the mercurial ingredient. But since very few of those who have been cured by the same means have reason to suspect any thing of this kind, and since a much freer use is made of mercury upon several other occasions without any of these ill consequences, it is most probable that these patients were mistaken in assigning this cause of their complaints.

The root of white hellebore is preferred by some, as having no smell, being perfectly innocent, and seldom failing of success. Medicines prepared from it should be made so strong as to occasion some

smart, but no inflammation : this will commonly be effected by one part of the powdered root and eight parts of ointment, used in the same manner as the sulphur ointment. The decoction or infusion of the same root, as mentioned above, will make a wash, which, used like the mercurial wash, will very rarely disappoint the patient.

CHAPTER XXIV.

Destillatio.

It was necessary that the throat, and mouth, and nose, and eyes, should all be kept in a state of moisture ; for which purpose a liquid is secreted from certain glands and glandular membranes ; and if this become incommodiously copious, it is called a catarrh or defluxion. This seems to arise sometimes from a too great weakness or relaxation of the secreting organs ; and sometimes from an abundance of superfluous humour, which nature can more easily discharge by these outlets ; or from the acrimony of the liquid, which makes the eyes tender, or irritates the nose to perpetual sneezing, or the trachea to coughing with hoarseness, creating a pungent sensation in the mouth, and making all the parts sore over which it flows. When the catarrh affects only the eyes, or nostrils, and the cavities which open into them, it is not attended with any cough ; but if its seat be in the glands of the throat, then there will not only be a cough in the day-time, but the defluxion will collect in such quantities during the first sound sleep before it wakes the person, that at last he starts up almost suffocated, and it is with great efforts that he clears the trachea so as to recover the power of breathing with tolerable ease : possibly some may have died suddenly, having been choked in this manner. A sudden sense of suffocation frequently attacks some persons, and it is with great and laborious efforts that they save themselves from being choked. Is not this affection a peculiar kind of convulsion ? and is not the thin froth which they expectorate in their struggle for breath, rather the effect, than the cause of this disorder ?

If such a catarrh lasts only a few days, it is called a cold in the head ; but in many it becomes a chronical disorder, and has lasted with no long intervals for several months, for four years, or every night for ten years ; or has returned periodically twice a month for several years, or once in three weeks. I have known it return in four or five persons annually in the months of April, May, June, or July, and last a month with great violence. In one a catarrh constantly visited him every summer ; and in another this was the only part of the year in which it ceased to be troublesome. The state of pregnancy has several times been attended with this complaint : and I remember it to have once continued for four years after the pregnancy. Irregularities of the menses, among other disorders of the health, have also been accompanied with an excessive flow of saliva ; and hysterick women have been infested with it for two or three months, in a degree not inferior to that of a moderate salivation.

raised with quicksilver. A bad sore throat has in some persons been followed for a long time by a very troublesome degree of spitting. But the salivary glands are peculiarly affected, as is well known, by mercurial medicines ; after the use of which a considerable salivation has teased some patients for many months, and in two or three it has continued frequently to return for above three years. Æthiop's mineral has several times had a similar effect ; and in one who had taken it forty days a great spitting ensued, which lasted three years. Many women have, within my observation, suffered in this manner from mercurial preparations ; but I hardly recollect an instance of it in the other sex.

Such extraordinary discharges of saliva have in a few instances evidently wasted the flesh and weakened the body ; but have been often borne for a long time without any manifest injury of the health. A weight and pains of the head have so frequently been relieved by a great catarrh, that in such cases it may be considered rather as a remedy, than a disease, and therefore violent means should not be employed to check it. These pains with feverishness and a slight defluxion are in some years epidemical, occasioning a remarkable languor, at least for some days, which has hung upon some patients, together with night sweats and loss of appetite, for a long time, and has ended at last in a fatal pulmonary consumption, after a gradual decline for two or three years.

An habitual catarrh has spontaneously ceased in the seventieth year of life, and also upon the coming on of a palsy ; but has been oftener known to end in an asthma. In many cases a variety of means has been used to stop it with very little effect. A spontaneous discharge of thin lymph from both the outside and inside of the ears has been found to check a catarrh : and so has an artificial one made by a blister. The pilulæ catarrhales of many dispensatories, consisting of aloes and opium, seem well calculated to divert the humour, and to soothe the irritation. The mucilage of quince seeds is very grateful, where the mouth is sore : where the glands are only weak and relaxed, the astringent decoctions of oak-bark, with alum dissolved in them, may have their use. A fit of the gout has supervened a catarrh, without affording any relief. Two persons, for other purposes, took at least a dram of the Peruvian bark every day for many months, during all which time they were free from that sort of catarrh which is commonly called a cold in the head, to which they had both of them been remarkably subject.

CHAPTER XXV.

Devoratio.

A CHILD two years and a half old swallowed two round pieces of copper money : the diameter of one was one inch and one-tenth of an inch ; the other was a little less. She seemed very ill for the first week after, and was unwilling to take down any food ; which

might be owing to the soreness of the throat, which these pieces had occasioned in passing. After this time she frequently took a little castor-oil, and enjoyed her usual health, complaining of nothing. Twenty-nine days after she had swallowed these pieces, they were both voided by stool, and did not show any sign of rust or corrosion.

The power of swallowing is weakened, and sometimes wholly lost, from various causes. In hysterick fits it is not uncommon to be unable to get anything down ; and a difficulty of doing it has constantly attended some women every time of their pregnancy. It is often seen that spasms, from whatever cause they arise, will come on in the middle of eating, stopping for a little while the descent of anything into the stomach, and occasioning great efforts to clear the œsophagus, which force up much phlegm, but nothing of what had been before eaten. This has returned at very uncertain periods, once in ten days, or three or four times in a year, and has lasted in this manner for several years. The muscles serving to deglutition are also liable to be seized with a paralytic weakness, rendering them incapable of performing their proper offices. A still more dangerous species of this disorder arises from a strumous swelling of the glands, which happens in all parts of the œsophagus from the fauces to the cardia ; in consequence of which the swallowing becomes gradually more and more difficult, till it be at last totally obstructed. I have known the same fatal mischief happen to the respiration from the same cause.

Besides these general incapacities of swallowing anything, there are partial ones, which respect only particular things. Some have been able to swallow any food, except meat ; others have readily taken down liquids, but not solids ; and, what is more strange, in other cases solids have found a passage down into the stomach with much greater ease than liquids. Though I have had opportunities of frequently observing most of these complaints, yet I have not been able to satisfy myself that any means which I have used have proved peculiarly serviceable, above the general method of treating those distempers to which the complaints appear to be related. The use of nourishing clysters is well known, by the assistance of which time may be gained ; and this in some of these disorders is of the utmost importance.

CHAPTER XXVI.

Diabetes.

THE diabetes is a complaint which happily occurs but seldom ; and hence, I imagine, it has happened, that the history of it in books is not very clear and precise ; nor has my own experience satisfied me in supplying their defects. I have scarcely had opportunities of observing twenty cases, where this was supposed to be the distemper ; and some of these seemed not to deserve the name. In fevers, which proved fatal, I have once or twice known the symptoms of a perpetual making of water, and in large quantities, with inextinguish-

able thirst. But the more usual manner in which this excess of urine shows itself, ranks it with chronical disorders. An unusual thirst is first taken notice of, with a tongue rough and furred, and a bad taste in the mouth ; the appetite fails ; the pulse is too quick ; the strength and flesh waste ; the skin is in a burning heat, without the least tendency to sweat ; the thirst makes these patients drink immoderately, and of course they make water much more frequently than is common to them, and in much larger quantities, like hysterical persons.

The urine should naturally be about four-fifths of the drink ; but even in health it will fall considerably short of this now and then for the space of a day, and will sometimes exceed the whole of what has been drunk ; and when it does it will resemble common water more than urine, in its want of colour, taste and smell. The urine in a diabetes is said to have a honey-like sweetness ; but in my judgment, formed upon the most perfect cases of this distemper, it ought in most persons rather to be called insipid : in one, joined with a fever, I found it sweetish. An extraordinary flow of urine has been remarkable for some months ; and yet, when measured, has not been found to exceed the drink, which, on account of the thirst, is more than these patients are usually aware of. However, towards the end of the distemper, the urine will considerably surpass the liquor, so as to be double of what they have taken. This deviation of the urine from its natural state will continue sometimes more, and sometimes less, for three or four years, and has returned after seeming to be entirely gone.

Though the excess of urine is the circumstance which has been chiefly attended to, yet, in every case of this kind which I have seen, the thirst has been first in time, and by far the most distressing, and what ought rather to have given name to the distemper ; but, in truth, they seem both to be rather symptoms of the breaking up of a constitution, and have hardly ever been known but in very infirm and old people, in whom age or distemper had so far injured some of the parts necessary to life, that death must soon have ensued, whether the patient made too much water, and was wasted in a diabetes, or made hardly any, and was bloated in a dropsy. It is not very improbable, that some trivial circumstance determined the body to take on one of these two diseases rather than the other, and that the removing of either of them would do but little towards saving the patient's life.

If the diabetes be, as I am inclined to think, the symptom of some other distemper, and not the disease of any of the organs which secrete the urine, the only useful remedies will be those which are directed to cure the principal malady, of which the diabetes is but an appendage. Accordingly it has appeared to me, that little good was to be done with alum, the Peruvian bark, elixir of vitriol, Bristol water, lime water, a repetition of emetics, or any other medicines, which were principally calculated to recover the kidneys from their supposed relaxed state to their natural tone and firmness.*

* A young man, who had laboured under a true diabetes for twelve months, was

CHAPTER XXVII.

Diarrhoea.

A DIARRHOEA arises from a variety of causes, most of which are void of all danger, and are easily removed. It is often brought on by that power, which is exerted in every part of the body, of freeing itself from anything painful and oppressive. Not only the mischief from the noxious qualities, and improper quantities of what has been taken, and immediately offends the stomach, are carried off by means of a diarrhoea, but likewise many disorders of remote parts, or of the whole body (such as morbid impressions from the causes of epidemical complaints, and of fevers), are by the self-correcting powers of an animal body determined to the bowels, and thence discharged by a diarrhoea.

The observation of this has given occasion to that useful caution of not being too hasty in stopping a recent spontaneous purging, it being frequently useful to co-operate with nature in promoting this evacuation. For this purpose rhubarb has been chiefly recommended, and deservedly; but instead of rhubarb I have many times given two or three drachms of the neutral purging salts, and think they have always done as well, and in some cases better, by making a more speedy and complete evacuation of what had offended the bowels, and with less sickness. An emetic is also successfully used where the nausea is very great; but otherwise I think a vomit is unnecessary. Fifteen grains of powdered ipecacuanha, or even half a pint of carduus or camomile-flower tea, will sufficiently answer this purpose.

After what had oppressed the bowels has been removed, a weak or too irritable a state of them may still continue: hence arise indigestions, flatulence, heartburn, frequent returns of the diarrhoea, and a predominant acid in the stomach. The testaceous powders and chalk julep are the proper correctors of this too ready acescence of the humours; which therefore should be employed: but they will not alone be of much avail in stopping a diarrhoea which is considerable enough to require any medicines at all. Nutmeg, cinnamon, pomegranate bark, and many other astringent vegetable substances, are much more efficacious, but yet often require to be joined with remedies which soothe the too great irritableness of the intestines, namely, gum-arabic, starch, and opiates. Half a dram of testaceous powder, fifteen grains of pomegranate bark, and half a scruple of nutmeg, with three drops of tincture of opium, may be taken in any distilled, or common water, once or twice a day in the more chronological and habitual purgings, or once in six hours in the more recent and violent ones. *Tinctura opii* mixed in any pleasant julep, so as to let the patient take as much as contains three or four drops after every purging stool, is in many cases required: and besides this manner of giving the opium, it is often extremely serviceable to give from twenty seized with an acute fever, and died. The body, which was carefully examined, showed no marks of disease. The kidneys were imagined to be rather fuller of blood than usual; and the gall-bladder was perfectly empty. -- E.

to forty drops in a quarter of a pint of mucilage of quince seeds, or of starch, administered in a clyster. Gum-arabic dissolved in water, or in milk and water, may be taken to the quantity of one ounce in twenty-four hours: and, lastly, one large spoonful of clean mutton fat, mixed with a quarter of a pint of milk hot enough to melt the fat, and drunk twice a day, is not only a good remedy, but nourishing food.

This method has appeared to me the most effectual, where the diarrhoea was curable and needed to be cured; but there are instances of its being habitual and harmless, at least for several years, and returning upon the slightest occasions for the greatest part of a person's life. I have seen an instance of a diarrhoea's continuing for three months at the rate of twenty times in a day without any apparent injury to the health. In such cases it is difficult, and perhaps hardly desirable, to affect a cure of what is not so much a distemper, as an inconvenience, which may be more than compensated by the benefit which it does to the general habit of the body. Where the appetite fails, and the flesh wastes, no time should be lost in checking the purging; but if neither of these be affected, a cautious delay, and gentle remedies, will prove the best means of restoring the patient.

Among the many causes of diarrhoeas, there are some, though few in proportion to the others, which are neither to be checked by the milder, nor subdued by the more vigorous methods of cure, but end only in the patient's death, after having been in vain opposed, as is usual in desperate cases, by a variety of regular and irregular practitioners. In some of these the glands of the mesentery and intestines have been found schirrous; in others, though they were opened, and all the parts examined by the most experienced and dexterous anatomists, the stomach and bowels have appeared in a natural state, and no cause of the distemper could be discovered. I have not mentioned a sea voyage, nor the Bath, because I have known them fail so often, that I have no encouragement to depend upon them; and rather think, where they have been supposed to be successful, that the success was in reality owing to other causes.

CHAPTER XXVIII.

Digitorum Nodi.

WHAT are those little hard knobs, about the size of a small pea, which are frequently seen upon the fingers, particularly a little below the top, near the joint? They have no connexion with the gout, being found in persons who never had it; they continue for life; and being hardly ever attended with pain or disposed to become sores, are rather unsightly than inconvenient, though they must be some little hindrance to the free use of the fingers.

CHAPTER XXIX.

Dolor.

PAIN is a symptom attending upon a variety of disorders, and is

sometimes itself the whole distemper. It is distinguished sometimes by being periodical; sometimes it has a particular name from the part which is frequently its seat; as headache, hemicrania, lumbago. All other parts of the body, which have any sense of feeling, are necessarily liable to pain, though they be not so frequently molested, as that the pain should be ranked as a distinct species with a particular name. Accordingly, there is no part of the body, or limbs, in which I have not observed a troublesome and lasting pain without any discolouring, or swelling, or tendency to inflammation. It will remain fixed in the same place not only for months, but frequently from one to ten years; and I have known such a pain complained of for fifteen, sixteen, seventeen, twenty-four, and even thirty years.

The more lasting of these pains are, as might be expected, moderate in degree: however, a few have continued for years, and yet at times have raged with a vehemence scarcely to be endured. Both sexes are subject to them, but women much oftener than men, and particularly the very young, and the infirm, and the pregnant. The thorax and hypochondria are the parts which most frequently suffer from them; and though some of these uneasy sensations may arise from internal disorders, yet in many instances there has been no reason to suspect that the lungs, or liver, or any other of the viscera, had the least share in producing them. In most of these patients the pains could not be traced up to any certain cause; but in several they have apparently arisen from terror and grief, and anxiety, and have unquestionably been recalled and exasperated by some disturbance of mind.

In several instances no sort of relief has been obtained from the cold bath, fomentations, liniments with or without *tinctura opii*, warm plasters, blisters, cupping, vomiting, purging, sudorifics: setons, and even a spontaneous abscess near the part affected has failed of doing good; Bath, and sea voyages, have proved equally unsuccessful. It is probable that no great hurt is done to the seat of this pain, since it has continued so long without causing any swelling or change of color; and yet I have once or twice known such ill-conditioned biles, and such a tendency to a mortification, follow the use of a blister, as if the part was far from being in a perfectly sound state; though there were no manifest signs of its being otherwise, except the pain. The means which have the seldomest failed, and have in some cases evidently contributed to the cure, are, cold-bathing, small perpetual blisters, or (if there be objections to blisters) *emplastrum cymini* worn for a long time. The most powerful internal medicine is *tinctura opii*, from ten drops to thirty given at night alone, or as many choose to give it, either in a spoonful of *lac ammoniacum*, or with a quarter of a grain of emetic tartar. The extract of hemlock has now and then appeared to weaken the cause of these obstinate ailments. Cupping has sometimes succeeded; but all other bleeding, together with emetics, and carthartics, have generally proved at least useless.

Beside the pains which are either constantly felt, or rage at certain times, there are others which are regularly intermittent, the fits of

which return as periodically as those of an ague : such I have known in the bowels, stomach, breast, loins, arms, and hips, though it be but seldom that these parts suffer in this manner; but the head and face are frequently afflicted with a periodical pain, which by its violence and duration is not the least of the maladies which embitter human life ; of these some account will be found under the article *Capitis Dolores intermittentes*.

CHAPTER XXX.

Dolores vagi.

WANDERING pains are near akin to the rheumatism, but may be distinguished from it by their being accompanied neither with swelling, nor any discolouring of the skin. Are they not chiefly suffered by those, whose muscular fibres have been weakened, strained, or stiffened, by long illnesses, profuse bleedings, bruises, irregular living, hard working, or the advances of age ? They usually continue for many years without other ill consequences than becoming gradually a little more troublesome ; but, in a very few, the parts principally affected have their power of motion more and more lessened, till at last it be quite lost. Time, and warm bathing, and flannel, may contribute a little to the cure, or relief, or however to checking the progress of these ailments ; and there are scarcely any other helps to be given.

CHAPTER XXXI.

Dysenteria.

THE Dysentery is common in camps, but does not often infest those who live in healthy places with the conveniences of life about them, except at certain seasons, when it becomes epidemical, particularly among children, old women, and infirm men, and it is then fatal to many. The distinguishing symptoms of it are frequent wants of going to stool, with excessive pain, and the voiding without any relief a very little inodorous mucus, often tinged with blood, and sometimes pure blood ; a pain just under the navel, together with a fever, and great loss of appetite, sleep, and strength, and sometimes a vomiting.

Since this distemper is commonly bred in camps by foul air, and is in some degree contagious (yet I have seldom seen two dysenteric persons in the same house), too great care cannot be taken in regard to cleanliness and fresh air, both for the sake of the patient and his attendants. The usual methods of treating this malady with which I was acquainted often failed of procuring ease, and of preventing its ending fatally in a sphacelus of the bowels. It appeared that in a dysentery some hurtful humours had been deposited in the intestines, which threw them into such disorderly agitations

as to hinder the expulsion of what had offended them. The readiness with which the neutral salts (especially the cathartic salt) purge, their power of controlling and quieting the irregular motions of the bowels, and their aptness to stay upon the stomach without being vomited up, made me conceive hopes that they would make a valuable addition to the anti-dysenteric medicines. At first I gave only one dram every six hours, which evidently soothed the pains very soon, and before it had any effect as a purge. In other cases larger quantities were given, and with the double good effect both of affording present ease, and afterwards of entirely removing, by effectual evacuations, the cause of the disorder.

After the danger of the distemper is past, the patient will still be teased with a tenesmus as long as any soreness or extraordinary tenderness of the rectum remains; in which case a clyster of half a pint of fat mutton broth and twenty drops of *Tinctura Thebaica* scarcely ever fails of proving a cure; and it is almost the only stage of the illness in which opium is either useful or safe: if it were given in the beginning to quiet the pain before any evacuation had been made, I apprehend it would be very prejudicial.

Where this distemper had ended fatally, it has been attended with a hiccup, and a fetid water voided by stool.

CHAPTER XXXII.

Ebrietas.

THE effects of hard drinking are, flatulence, loss of appetite, morning sickness, wasting of the flesh and strength, tremblings, pains of the stomach, cough, jaundice, dropsy, forgetfulness and inattention, giddiness, diarrhoea, broken sleep.

If remedies be applied in time, and the habit of drinking can be broken, much may be hoped for in restoring the health. It is generally a favourable circumstance to have an illness arise from an external cause, rather than from any internal failing. Men of a strong constitution and high health are those who most usually indulge themselves in this excess; and these circumstances, which betrayed them into their danger, will greatly assist in helping them out.

Bath water seems specifically efficacious in curing these complaints, if applied to in time, before the liver and stomach are too deeply hurt. Nor is Bath only a remedy against the mischief which has been already done; but it is also singularly useful in preventing a relapse, by enabling the patients to correct the habit of drinking: for the nature of this water is so friendly in warming and comforting the stomach, as to relieve all that coldness and anxiety which almost irresistibly force a hard drinker to fly to strong liquors for ease under these insufferable sensations. Warm aperient medicines occasionally used so as to prevent costiveness, if there be a disposition that way, and bitters, are the whole of what is further necessary to establish the health.

CHAPTER XXXIII.

Epilepsia.

THE epilepsy may be called the reproach of physicians as well as gout ; for it was well known before the writing of the most ancient medical books, and yet no certain method of cure has been discovered. The number of remedies, which are to be found for it in books and vulgar tradition, afford a strong presumption that we have no effectual one. The difficulty of curing this disease, either by the cautious practice of such who have a character to lose, or the more hazardous attempts of men who have a character to get, is sufficiently evident from its having remained uncured in some who were unable by their wealth and power, and prompted by their credulity, impatience, or despair, to try all sorts of means for its removal. The good sense of the world has done more than medicine towards mitigating this great evil, by lessening the imaginary part of it : for it is now generally considered in the same light with any other distemper, without adding to its malignity by the workings of fancy or superstition. It is no longer believed to be the immediate effect of some demon's malice ; nor is it regarded enough to let it dissolve public councils, and to put a stop to all business ; neither is it detested with that degree of horror by the acquaintance and friends, which must have shocked the miserable patient more than the cruellest attack of the disease.*

The fit makes the patient fall down senseless ; and without his will or consciousness presently every muscle is put in action, as if all the powers of the body were exerted to free itself from some great violence. In these strong and universal convulsions, the urine, excrements, and seed, are sometimes forced away, and the mouth is covered with foam, which will be bloody, when the tongue has been bitten, as it often is in the agony. This wretched condition affords a picture of the greatest misery and distress even to a stranger ; to the friends and relations the horror of such a sight is much greater ; but happily the patients themselves know nothing during the fit of what the body is enduring.

Many suffer these attacks without the least previous notice ; others are sensible of their approach ; and the shock which this foreboding occasions is compensated by their being able to secure themselves from some of the mischiefs of a sudden unforeseen fall. It is not unusual to have a little warning of some of the first fits, and afterwards to have them come on without any previous sign. The more common symp-

* Among the ancients, when any one happened to be seized with an epileptic fit, those who were present used to spit, and sometimes into their own bosoms ; either to show their abomination, or to avert the omen from themselves. Plautus calls this distemper, *Morbus qui sputatur*. Captiv. act. iii., seen. iv. v. 18, and from what follows, it seems as if they used to spit upon the epileptics as a charm to relieve the convulsions. *Eum morbum mihi esse, ut qui me opus sit insputarier*, ver. 21. *Multos iste morbus maccrat, quibus insputari saluti fuit*. v. 22. Hence it has been conjectured, that St. Paul's *thorn in the flesh*, 2 Cor xii. 7. and *infirmity of the flesh*, Gal. iv. 13, and *temptation in the flesh*, ver. 14, might be the epilepsy, and that the word ἐπιθυμία is used literally, and not in a metaphorical sense.

toms which are the remoter forerunners of a fit, are a general restlessness and uneasiness, a headache, vertigo, and other disagreeable feels in the head, disorders of the stomach, and sleepiness ; these will in many persons hang upon them for two or three days before they fall. The most usual sensations immediately before the fit are a slight delirium, which will sometimes continue three or four hours, and a vapour rising up out of the stomach to the head, which in some few affects their palates and nostrils like musk. The less common warnings of the approach of the falling sickness are pains in the bowels, numbness of the hands and arms, a peculiar sensation in some of the extremities gradually diffusing itself all over the body, dimness of sight, a faltering, and difficulty, or a total loss of speech, a hiccup, a vomiting and purging, a pain in the back, a coldness of the extremities, a great defluxion of phlegm, a blackness of the face, and shortness of breath ; lastly, a tendency to fainting will sometimes be followed by a fit, and sometimes the fit will seem to rise no higher than this, and the patient will escape for that time with feeling no more of it than this half fainting, joined perhaps with a forgetfulness or delirium for a few minutes. These are the shortest fits of all ; the more common ones will last from a quarter of an hour to three hours ; and in more extraordinary cases the patient will lie senseless for two or three days, having during all this time frequent accesses of convulsions or fits. Giddiness, and dark spots dancing before the eyes, are the constant attendants of some epilepsies.

All possible varieties are to be found in the returns of this distemper : many will have several of the slighter fits every day, or one in a day, or one in a week, or every month, or only two or three in a year. The epilepsy has lain dormant for thirteen years, and then returned worse and oftener ; in others the respite has been still much longer, though with such threatenings of a relapse, as to put it out of all doubt that the cause still remained. After the convulsions have ceased, and the patient begins to come to himself, he generally falls into a sound sleep, for one, or two, or even six hours. It is obvious to suppose that this sleep must prove a relief after the fatigue of the convulsions ; and I never knew but one instance in which it was found so detrimental, that the patient requested always to be roused from it, as he could never indulge it without being the worse. It must be owned that sleep seems to favour the returns of these fits, just as it aggravates all the distempers attributed to the nerves ; the first attacks of the epilepsy being most usually in the night, just after the first sleep.

Some epileptics feel themselves so little hurt or altered by a fit, that, knowing nothing of what passes during the time of it, they can hardly be persuaded that they have had one. Others after they have come to themselves have felt a heaviness and numbness for three hours, or a headache, a sickness and vomiting, a languor and dulness, or have not perfectly recovered their understanding and memory for two or three days : and these are the immediate effects of single fits. The more distant ones of repeated fits are, forgetfulness, stupidity, childishness, and a general debility of the body, or

a palsy of some parts, or an apoplexy. These consequences appear very soon in some, while others continue a long time unhurt by these violent shocks; so that some who began to labour under this malady very early in life, and had experienced many returns of it, have yet lived to be promoted to some high offices in the state, merely on account of their extraordinary abilities. Julius Cæsar is well known to have been a remarkable instance of this kind.

Both sexes, and every age, are liable to this illness; children are much more so than adults, and much more easily get rid of it. One would likewise expect that the weaker sex would, on account of their weakness, be greater sufferers by epilepsies; but it has appeared to me, that though boys and girls be equally subject to epileptic convulsions, yet fewer women are afflicted with them than men. Convulsions are so common in children, from the day of their birth to their third or fourth year, as to make it probable that they may be occasioned by a variety of transient causes, such as worms, accidental indigestions, griping pains of the bowels, and many other sharp and sudden pains; there is therefore always ground to hope that a child's convulsions may not proceed from the same obstinate cause from which epilepsies arise in adults; and accordingly many children under four or five years of age have had a few such fits, who have never afterwards experienced a return. The true epilepsy most usually shows itself in childhood or youth; but there is hardly any time of life, from the first day of it to extreme old age, at which it has not been known to make its first appearance. I have noted several who have begun to be epileptic at almost every year between twenty and fifty; a few have fallen into it at sixty; and I saw one whose first attack was in the seventy-fifth year of his life, and from that time he was often visited with it for at least six or seven years, and probably as long as he lived.

It has been an old observation among physicians, that epilepsies beginning in childhood often terminate about the year of puberty; which has by no means been verified by any experience which has fallen in my way. On the contrary, this malady has appeared to me often to come on at that time of life, but I have not remarked one instance of its yielding in either sex to the change made by puberty. Wherever it has lasted beyond the fifth or sixth year, it has generally proved a tedious distemper, and reached it beyond the beginning of maturity. If I could therefore suppose that in forty years practice a sufficient number of epilepsies might occur upon which to form a judgment of this aphorism, I should be inclined to think that it was founded on theory, or in the hopes of the physician, rather than in fact. As there is no age at which this great affliction does not come on, so there is hardly any at which it has not finally left the patient.* But it must be owned that it is doubtful whether

* Nicolaus Leonicenus a cunabulis ipsis ad trigesimum annum morbo comitiali adeo laborabat, ut pertaesus vitae pene sibi manus afferet: sed post trigesimum annum plane eo malo defunctus, omnibus membrorum ac sensuum officiis integer, nulla morbi suspitione ad quartum et nonagesimum annum pervenit.—*Jos. Scal.* ep. 19.

nature has not had more share in most cures than medicine, because there is none which has not failed so often, that we cannot be confident of its having much merit where it has appeared to succeed.

The epilepsy is in some degree hereditary ; yet as there are several examples of its being cured, or spontaneously ceasing, in those whom it had frequently attacked, there is a stronger reason to hope that its powers may be often spent before it reaches the children ; and it is found in fact, that many pass their whole lives untainted with this part of the constitution of their parents.

In the beginning of the epileptic fit care should be taken to loosen any bandage which might be about the neck ; for this part is apt to swell, and without this precaution might endanger suffocation : the patient should be placed upon a couch, or bed, and watched that he may not fall off, and that he may not throw his legs or arms about in such a manner as to hurt himself. All further officiousness will be prejudicial. To force liquids into the mouth, to hold pungent salts to the nose, to rub the temples, and to force open the hands, is certainly useless, and not quite innocent. To open a vein upon account of the fit is still worse, being a needless waste of blood, which may weaken the patient, but not the disease. The interval of the fits is the only proper time in which any remedies should be employed ; and in such cases as this, where the experience of mankind has not yet discovered any upon which we can have much dependence, there is the most good to be done by finding out the weak part of the patient's constitution, and directing such means as will keep him in the best general health, that he may have every assistance from the powers of life ; for they are so formed, that they are always ready to exert themselves in weakening and removing whatever distresses them ; and the stronger they are, the more vigorous and successful will their efforts be.

No simple has had a greater reputation as an anti-epileptic than the wild valerian root, and it may have been beneficial in some cases ; but one ounce, and even fifteen drams, have been given every day with little or no advantage. The gout has come on without affording any relief, nor can I say much in favour of blisters, issues, setons, the cold bath, and chalybeate waters, except where they have been useful to the general health. Quicksilver I have known used both inwardly and outwardly ; and if it have seemed to do good in one case, it has certainly been useless in another. Two persons have imputed their cure to a total abstinence from all animal food ; but the same abstemious diet has failed in a third. Five ounces of a very strong infusion of wild valerian root, with one dram of musk, given as a clyster every eight hours for three days in a desperate case, had the credit, and perhaps justly, of saving the life of one who had lain senseless, with frequent returns of convulsions, for two or three days. Worms in children, or disordered bowels, have occasioned convulsive fits ; and gentle purgatives will generally cure them, by removing the cause : but purges should always be avoided in a just epilepsy, because the causes of

it will be aggravated by purging. I knew a girl whose fits always came on just after her having a stool. Vomits I have known to be equally hurtful, and likewise bleeding. Sleep unquestionably disposes a fit to come on, and a too great indulgence in this article may probably contribute to fix the distemper. All occasions of terror should carefully be avoided; for terror will not only bring on a fit, but has been the original cause of the distemper. A life of debauchery, and particularly an intemperate use of women, has a peculiar tendency to produce and strengthen this evil. My experience has furnished me with so little to say concerning the numerous anti-epileptic medicines to be found in all the practical writers, that I must let their merit rest on the characters of them which are there to be found.

CHAPTER XXXIV.

Erysipelas.

ST. ANTONY'S fire shows itself in a redness of the part, with some degree of swelling, heat, and pain; and it is frequently beset with small watery blisters. It very rarely appears without a fever, the usual signs of which precede the appearance upon the skin for one, two, or three days. The genuine erysipelas is oftenest seen in the face, head, neck, and shoulders; yet many inflammations which are the forerunners of a suppuration, or sphacelus, in other parts, particularly the legs, have an erysipelatous appearance, and are called by that name.

This disorder begins with a small red spot in one of the parts just mentioned, which gradually extends itself, and keeps moving from one part to another. The skin is sometimes so deeply hurt, as to have an ill-conditioned ulcer formed, which cannot be healed without much time and care. The little vesicles, if they be numerous, will, upon breaking, make the part so sore as to require some soft liniment spread upon linen, to defend it from the rubbing of the clothes. Except in these two cases, it is better not to make use of external application to the parts affected. The height of the fever, which is almost always joined with this disorder, is much greater than might be expected from the quantity and degree of inflammation, and not seldom rises to light-headedness, and sometimes is fatal; where this happens, the erysipelatous part becomes pale, and the distemper is said to be struck in. Some constitutions seem particularly subject to this illness, and have frequent returns of it; and whoever has once suffered it, seems much more liable to have it again. It has visited a person regularly once every year, and sometimes twice, for many years. The apparently healthy, and young, are not entirely secure from it; but it is much more common in those who are past the prime of life, and who have begun to find their health a little impaired. Instead of giving vent to any thing which injured the constitution, and carrying it off, St. Antony's fire

has appeared to me at least to do no good, and I am inclined to think it does some harm.

This distemper seems to partake of the nature of those which are called malignant, more than of the inflammatory ; by which I mean, that in general it does not require, nor bear, much evacuation. I have seen very dangerous symptoms follow not only bleeding, but even a gentle purge, though given after the patient had begun to recover. Notwithstanding this, the inflammation may sometimes run so high, that it may be proper to take away a little blood, which has been done with success ; and I have found a spontaneous bleeding at the nose to be advantageous. In this, as in all other fevers, it is necessary to check whatever troublesome symptoms may arise, by their proper remedies ; and besides these, I have only to recommend two ounces of a decoction of bark, with thirty drops of tinctura opii camphorata, or two drops of tinctura opii, given every six or eight hours.

CHAPTER XXXV.

Essera, or Nettle-Rash.

THE nettle-rash is a distemper of the skin, which being attended with no danger, is mentioned but seldom, and slightly in books ; though it be often so extremely troublesome, that physicians might justly have thought it important enough to have told us more of what they had learned from their experience relative to its cure.

It has its English name from resembling in its appearance the effect of stinging-nettles upon the skin. Sydenham, in his chapter on the erysipelas, reckons it a species of that disease ; and Sennertus and others, describe it under the name of *Essera*, supposing it to be the same distemper with that which is so called by the Arabian physicians.

The little elevations upon the skin in the nettle-rash often appear instantaneously, especially if the skin be rubbed, or scratched, and seldom stay many hours in the same place, and sometimes not many minutes. There is no part of the body exempt from them. Where many of them rise together, and continue an hour or two, there the parts affected are often considerably swelled ; which particularly happens in the face, arms, and hands. These eruptions will continue to infest the skin, sometimes in one place, and sometimes in another, for one or two hours at a time, two or three times every day, or perhaps for the greatest part of the twenty-four hours. In some persons they last only a few days ; in others many months. I have known several complain of them for two years with very short intervals, and for seven, or even ten years.

Males and females are equally liable to the essera, and I have observed it in all ages, from childhood to decrepit old age. Constitutions tainted with strumous, or harassed with rheumatic and hysterick complaints, or broken down with intemperance, palsies, and age, have all been, as far as I could judge, equally fitted for this disorder ; but

not more so than the soundest state of health, in the vigour of life, to which all other complaints were unknown.

If some of the sufferers by this eruption have found themselves well whilst it appeared, and infested with pains of the head and stomach, and languors, upon its disappearing, others have complained of as much languor, and equal pains of the stomach, during the time of its appearance; but far the greatest number experience no other evil from it besides the intolerable anguish arising from the itching, which will sometimes make them fall away, by breaking their rest, and is often so tormenting as to make them almost weary of their lives.

The external use of cantharides has been known to occasion this ail in several persons, and in some the internal use of the wild valerian root; but all who are affected with it find the itching and little eminences hardly ever fail to be brought on by any degree of scratching or rubbing the skin. The seasons of the year have no constant effect either in alleviating or exasperating the disorder; and the same may be said of cold and heat, and particularly of the heat of the bed, which appears to make some much better, and others much worse. Sea-bathing has seemed to occasion it in some, and to relieve it in others, but is perhaps in reality innocent and useless in all, as it certainly has been in several, as well as warm bathing, though continued for an unusual length of time. Mercurial and sulphureous ointments have been found ineffectual in curing it; and the powder, infusions, and decoctions of white hellebore root, in ointments and lotions, have only for a short time changed the itching into smarting. Oil, vinegar, and spirit of wine, applied to the skin, will sometimes mitigate the itching, and afford a little present relief.

The appearance of this eruption was before said to resemble the sting of a nettle; but, together with such little risings in the skin, there are sometimes long wheals as if the part had been struck with a whip. Whatever be the shape of these eminences, they always appear solid, without having any cavity or head containing either water or any other liquor; and this affords a useful mark by which this cutaneous affection is distinguishable from the itch; for it often happens that the insufferable itching attending this eruption provokes the patient to scratch the parts so violently, as to rub off a small part of the cuticle on the top of these little tumours; a little scab succeeds, and when the swelling has gone down, there is left an appearance hardly to be distinguished from the itch, but by the circumstance just now mentioned. It has been this exact resemblance which has occasioned the application of sulphureous and mercurial ointments in many persons whom I have seen without producing either any good or bad effect. The essaera further differs from the itch in not being infectious; for though I have once suspected that a husband had catched it from his wife, yet my suspicion was probably not well founded in this instance, because in many others I have known that this complaint showed no signs of being communicable by contagion.

I never saw a reason to suppose it had occasioned any such viciousness of the humours, as greatly to require, or to be much the better for

internal alterative remedies : and if the itching could be certainly and expeditiously allayed, we might spare ourselves the pains of looking out for any other method of cure.

CHAPTER XXXVI.

Expergesci cum Clamore et Terrore.

To wake in a violent hurry and agitation, and with loud exclamations, is a symptom sometimes observed in the gout, in palsies, and in hysterick complaints : it is a very common attendant upon pains of the bowels, worms, and convulsive fits in children ; and when they have started out of their sleep in this manner, they have been above an hour before they have perfectly come to themselves.

CHAPTER XXXVII.

Febris.

A FEVER, or general languidness with a quick pulse, is sometimes an attendant upon other disorders, and will retreat in proportion as they are mitigated by their proper remedies. When it is itself the only distemper, it is still so various in its nature, that very different methods of cure must be employed for different fevers ; and some part of the treatment must be learned from knowing the patient's age, and constitution, and manner of living, as well as from a due attention to the season of the year and the peculiar nature of the reigning disease.

Where the fever is evidently inflammatory, as in the inflamed sore throat, peripneumonies, pleurisies, and inflammations of the bowels, there no one can doubt of the necessity of bleeding ; and repeated bleedings are often required. The jail-fever, and others which resemble it, seldom appear to stand in need of bleeding ; but it is often of great importance in the beginning of these fevers to clear the stomach and bowels, which is pointed out by the sickness which at that time teases the patient. This may very properly be done by one scruple of ipecacuanha, joined with one grain of emetic tartar, which, beside vomiting, will generally occasion a few stools. The sickness is usually so perfectly removed by one dose of this medicine, that a second is very rarely wanted. A headache is a very distressing symptom in the beginning of fevers, for which a blister between the shoulders is an almost certain remedy. In the inflamed sore throat, pleurisies, and peripneumonies, blisters are likewise of great use in abating (perhaps by diverting) the inflammation, and in all stages of low fevers, where they act as cordials, and stimulate the powers of life to exert themselves, and to shake off the languor with which they are oppressed. The strangury which they are apt to occasion is certainly cured by a clyster made of water and oil, each two ounces, and fifteen drops or more of tinctura opii. In the progress of the

illness, if a purging should come on, the helps mentioned under the article of diarrhoea, must be employed to check it. The contrary state of too great costiveness will be best removed by a clyster of half an ounce of salt, and twelve ounces of water, with two ounces of oil. Restlessness and want of sleep, will often yield to fomenting the head and feet frequently with flannels wrung out of hot water; or two or three drops of tinctura Thebaica may be given every six hours. Heat, and thirst, may be allayed with lemonade, or toast and water. Languor, and excessive lowness, may safely be treated with wine or cider mixed with water, or a spoonful of the camphor julep. Hiccups, and convulsive twitchings, and agitations, have appeared to be relieved by frequently taking a spoonful of the musk julep; but though musk may have some virtue in quieting spasms, and camphor has in some cases procured sleep, yet their effects are neither great, nor constant. I have seen one scruple of camphor given every six hours, and, together with this, one scruple of musk as often in the intermediate hours: they were both of them borne well by the stomach, but had no perceivable effect in abating the convulsive catchings, or composing the patient to rest. While the sick person is in his senses, his own inclination, and strength, will best determine whether he should sit up, or keep his bed, even in the eruptive fevers, as well as in all others.

A specific in continual fevers is, I fear, still one of the desiderata in physic, though it has been much sought after, particularly among the preparations of antimony. In the beginning of fevers, the safe antimonial emetics and cathartics are unquestionably useful; but I have never yet been able to satisfy myself that they do more good than would be done by any other equally strong purges and vomits. Many judicious physicians are persuaded that, in the succeeding stages of a fever, antimonial medicines, given in such a dose as just not to vomit or purge, are efficacious in abating the fever, either by bringing on a sweat, or by some specific power. In deference to their judgment, I have directed four grains of emetic tartar to be dissolved in four ounces of some simple distilled water, of which solution I have given two drams, which contain a quarter of a grain, mixed with three spoonfuls of water, every six hours. This quantity is as much as an adult can usually bear without being sick; and where it is more than the stomach can be easy with, the draught may be divided into two parts, to be taken at the distance of half an hour from one another, instead of the whole being taken at once. Of this medicine I have had considerable experience; but not enough to convince me that antimony possesses any specific virtue of curing continual fevers.

The Peruvian bark has been much dreaded, except in a clear and perfect intermission; but the free use which has been made of it, notwithstanding the height of the fever, in mortifications, and in other cases, where a good suppuration was wanted, has taught us, that this dread is as groundless as the many other fears which people have had of this valuable simple; of which the more we know, the less

danger we find of its doing any harm, and the more powers of doing good. Accordingly it has been tried in high continual fevers, in which I am not so sure of its being useful, as I am of its being innocent, not only when two ounces of the decoction have been given every four hours, but when two scruples or a dram of the powdered bark have been directed to be taken as often.

In every fever it is of the utmost consequence to keep the air of the patient's chamber as pure as possible. No cordial is so reviving as fresh air; and many persons have been stifled in their own putrid atmosphere by the injudicious, though well meant, care of their attendants. The English seem to have a very extraordinary dread of a person's catching cold in fevers, and almost all other illnesses; the reason of which I could never rightly comprehend. The sick do not appear to me to be particularly liable to catching cold; nor do I know that a cold would be so detrimental, as not to make it worth while to run the risk of it for the sake of enjoying fresh air. I remember one, who, being delirious at the eruption of the small-pox, was so unmanageable, that by frequently throwing the clothes off, and being frequently naked, he catched a great cold, as appeared by all the common signs of one; yet I could not observe that it had any ill effect in retarding the maturation, or heightening the fever, or preventing his recovery. It is often useful not only to keep the room well ventilated, but likewise to correct the bad air, by pouring vinegar on a red-hot shovel, and making the room full of the acid vapour which arises from it.

Very pale urine, unless the patient have drunk a great quantity of small liquors, is a bad sign in fevers, and it is very desirable to see it become thick, and deposit a sediment; but I know no other use of it, than the giving us hope that the distemper is beginning to abate: nor am I aware that any important purpose can be answered by examining the feces; for I know no state of them which could direct us to employ, or to forbear, any particular method of cure.

For the use of observing the pulse in fevers, see the Medical Transactions, vol. ii., art. 2.

In the long and dangerous fevers of children, it is very common for them to lose all power of speaking for many days; but this is no bad sign, and as the fever abates, the voice always returns.

Adults, as well as children, are sometimes rendered deaf for a time, without any bad consequence.

Concerning the wry-neck of children, see chap. xci., *on Spasms.*

CHAPTER XXXVIII.

Febris Intermittens.

THE fit of an intermittent fever seldom lasts above twenty hours, and not often so long. The shivering, and sense of coldness, with which it begins, will continue from half an hour to two hours; then succeed the heat, and restlessness; and these yield to a sweat, the

degrees of which, and duration, are very various, according as they are more or less promoted by lying in bed and drinking warm liquors. The fit will be a quotidian, returning every day; or a tertian, and return every other day; and if there be the interval of two days between the fits, it is called a quartan. Much longer intervals have been known; but these happen so seldom, that they have been distinguished by no name, and are not of any importance to deserve our notice.

Besides the common appearances of fever, every fit has been sometimes accompanied with other complaints; in some with rheumatic pains; in several with a light delirium; in others with an eruption of the skin, or colic, or faintings, with a pain and swelling of the testicles, a languidness, and almost paralytic weakness of the limbs. These have regularly come and gone with the fever, and with the cure of that have finally disappeared.

It is a question, or rather perhaps it was a question before men knew well how to cure an intermittent, whether they might safely attempt to cure it. For it was supposed to be an effort of the body to relieve itself from some latent seeds of mischief, which would show themselves if the intermittent were cured. Some respectable names in physic have patronised this opinion, and I began to practice with a persuasion of its truth: but every year's experience weakened my belief of this doctrine, and I have long since, by numberless proofs, been convinced of the safety of stopping this fever as soon as possible: nor can I doubt of having observed ill consequences where the fever has been suffered to remain, by delaying to use the effectual means of preventing its returns. The Peruvian bark is the well-known specific, with which Providence has blessed us for the cure of this disorder; and if the first fit has been marked so clearly, as to leave no doubt of its being a genuine intermittent, this remedy should be imminately given in such a manner, as to prevent, if possible, a second. If six drams of powdered bark can be got down, by taking a dram at a time, before the hour of its return, the patient will find the fever at least much weakened, if not entirely removed; and the same quantity taken four times a day for six days will usually free the patient from all danger of a relapse. But if this medicine be not uncommonly disgusting, there may good arise, but there can be no harm, from his taking it twice a day for ten days longer. This way of using the bark I think is the most to be depended upon; but where the bark in substance cannot be taken, or borne, there two ounces of a strong decoction used as often will generally be successful. The success would be made less uncertain, if there were no objection from the patient's palate, or stomach, to the dissolving in each dose one scruple or half a dram of the extract. Bark is a difficult medicine to be got down children's throats, especially in such quantities as would cure their agues. One scruple of the extract, and as much sugar, first mixed with half a spoonful of water, and then with a spoonful and a half of milk, is a form which will disguise its nauseousness sufficiently for many children to take it without any unwilling-

ness. But wherever either in them, or in adults, it cannot be taken or borne in any form upon the stomach, they may still have the benefit of it by having three or four ounces of the decoction with one or two drams of the powder injected at least twice a day as a clyster; and if this should not readily be retained, ten drops of tincture of opium may be added. It has been proposed to cure an intermittent by keeping the feet immersed in a strong decoction of bark: this I have known tried without success. Cases sometimes occur in which the bark, though properly taken, will not hinder the returns of the fever: this is suspected to be owing to a foulness of the stomach, which hinders the bark from making a due impression upon it; and therefore an emetic is given, and afterwards the bark is repeated as at first. If it still fail, a scruple of camomile flowers, powdered, may be given in the same manner as the bark, and I have known this method more than once succeed: I have also given in some extraordinary cases two scruples of calamus aromaticus, and have found it more efficacious than a variety of other means which had been previously directed. Sometimes it has been of use to take twenty drops of tincture of opium when the fit is coming on.

A quartan ague is far more obstinate than a quotidian, or tertian, and will for a long time elude the power of the bark given in the usual manner, and all other remedies. I have found several of the inveterate quartans yield to a quarter of an ounce of the bark taken just before the coming on of the fit. From a persuasion that the bark is dangerous, if taken before the fever has perfectly subsided, many begin to take it from very uneasy apprehensions, and sometimes will too long delay taking it, to their great detriment. Now the only harm which I believe would follow from taking the bark even in the middle of the fit, is, that it might occasion a sickness, and might harass the patient by being vomited up, and might set him against it; but in my judgment it can never be taken too soon after the fever begins to decline, provided the stomach will bear it.

CHAPTER XXXIX.

Febris Hectica.

A HECTIC fever is frequently mentioned in the writings of physicians, and likewise in common conversation; but the precise meaning of the term hectic has not been well settled, and generally acknowledged; so that probably, by different authors, it is not always used to express the same illness. I understand by it that fever, which passes under the name of the irregular intermittent, or symptomatic, and what usually attends great suppurations; of which it may not be useless to give a short description, with some mention of the causes by which it is brought on.

This fever very much resembles the true intermittent, from which it must be carefully distinguished; for their nature is totally different, requiring a very different treatment, and the two distempers are extremely unlike in the degree of danger with which they are attended.

In the intermittent the fits are longer, and the three stages of cold, and heat, and perspiration, are more exactly defined, and in all the fits continue nearly the same length of time : after which there is a perfect cessation of the fever. But in the clearest remissions of the hectic there is still some quickness of the pulse, so as to beat at least ten strokes more in a minute than it should in a healthy state. The fits also of the hectic vary from one another, seldom continuing to return in the same manner for more than three times together. The shivering is sometimes succeeded immediately by perspiration, without any intervening heat ; sometimes it begins with heat, without any preceding cold ; and the patients sometimes experience the usual chillness without any following heat or sweat. The fit therefore of the hectic is usually shorter, but not only because the whole three stages are shorter, but because one of them is often wanted, and sometimes even two.

The hectic patient is very little, or not at all relieved by the breaking out of the sweat ; but is often as restless and uneasy after he begins to perspire, as he was while he shivered, or burned. All the signs of fever are sometimes found the same after the perspiration is over ; and during their height the chillness will in some patients return, which is an infallible character of this disorder. Almost all other fevers begin with a sense of cold ; but in them it is never known to return and to last twenty minutes, or half an hour, while the fever seems at its height ; which in the hectic will sometimes happen.

However, it is not very unusual for the hectic to have two fits, and even three, as exactly resembling one another, as those of a genuine intermittent; but afterwards they never fail to become totally irregular : so that I hardly remember an instance in which the returns continued regular for four successive fits.

The hectic in some cases come on so seldom, and is so slight, as scarcely to be perceptible for ten or twelve days ; but in other instances, where the primary disorder is very great, the fever will be strongly marked, and will attack the patient several times on the same day, so that the chillness of a new fit will begin as soon as the perspiration of the former is ended. Several little threatenings of a cold fit have been known to return within a few hours.

In a regular intermittent, the urine during the fever is pale, and thick in the intervals ; but its appearance in the hectic is governed by no rules ; so that it will be either clear, or loaded, equally during the fits and in the intervals ; or even muddy in the fever, and clear in its absence ; and will now and then, as in common fevers, be pale during the attack, and muddy afterwards.

Beside the usual distress of a fever, the hectic patient is often harassed with pains like those of the rheumatism, which either wander through the whole body, or remain constant and fixed in one part ; and, what is rather strange, often at a great distance from the primary malady, and in appearance unconnected with it. These pains have been so great, as to make no small part of the patient's suffer-

ings, and to be not tolerable without the assistance of opium. They are chiefly observable, as far as I can judge, in those whose hectic has been occasioned by ulcers in the external parts, as in cancers of the face and breast, and in other places open to the outward air. In some few hectic cases it is remarkable that considerable tumours will instantly arise upon the limbs, or body, lasting only for a few hours, without pain, or hardness, or discolouring of the skin.

There have been those who when they thought themselves tolerably well have suddenly and vehemently been seized with a fever, not unlike an inflammatory one; and, like that, seeming very soon to bring the life into danger. However, after a few days, the distemper has abated, and the patients have had hopes of a speedy recovery: but these hopes have not improved upon them; for though the first commotions have subsided, and but little fever remain, yet this little, being kept up by some deep and dangerous cause, resists all remedies, and gradually undermining the health, ends only in death. But this is one of the rarer forms of this malady; for in the beginning it most usually dissembles its strength, making its approaches so slowly, that the sufferers feel themselves indeed not quite well, but yet for some months hardly think themselves in earnest ill; for they complain only of a slight lassitude, and that their strength and appetite are a little impaired. This state of their health may be judged not very alarming; but yet if at the same time the pulse be found half as quick again as it should be, there will be great reason for solicitude about the event. There are not many diseases in which an attention to the pulse affords more instruction than it does in this; yet even here, whoever relies too confidently and entirely upon the state of the pulse, will in some cases find himself misled: for it happens, as well as I can guess, to one among twenty hectic patients, that while all the powers of life are daily declining, with every sign of an incurable mischief, the artery will to the last minute continue to beat as quietly, and as regularly, as it ought to do in perfect health.

Great suppurations in any part of the body will bring on this fever; and it will particularly attend a scirrrous gland, while it is yet very little inflamed, and in the very beginning of the inflammation. It increases in proportion as the gland becomes more inflamed, or ulcerous, or more disposed to a gangrene. Glandular diseases are of such a nature, that some patients will linger in them, not only for many months, but even for a few years.

When a scirrrous inflammation is in any external part, and obvious to the sight, or touch, or when its seat is in the lungs, or in any of the viscera, whose functions are well known, and cannot be disordered without showing manifest signs of the disease, in all such cases we can be at no loss about the cause of the fever. But if an internal part, the uses of which are not clearly known, happen, by being diseased, to bring on hectic symptoms, there the fever which is only symptomatic, may be mistaken for the original and only distemper.

Lying-in women, on account of the mischief arising from difficult

births, are liable to this fever, and it often proves fatal. The female sex in general, after they have arrived at their fiftieth year, are in some danger of falling into this irregular intermittent: for in that change which their constitution experiences about this time, the glands of the womb, or ovaries, or of the breasts, are apt to become schirrous, and as soon as they begin to inflame, the hectic comes on; and not only these, but all the glandular parts of the abdomen, seem at this time particularly liable to be diseased, and to bring on this, of which we are speaking, as well as all other signs of a ruined constitution. The same evils are the portion of hard drinkers, arising from the scirrhoue state of the liver in particular, and often of the stomach, and other viscera, which are the well-known effects of an intemperate use of wine and spirituous liquors.

The slightest wound from a sharp instrument has been the cause of many distressful symptoms, and such as have even proved fatal. For after such an accident, not only the wounded part has been in pain and has swelled, but other parts of the body, and those at a great distance from the wound, have been affected with pain and swelling, and have shown some tendency to suppuration. These symptoms never fail to be joined by the irregularly intermittent fever, which continues as long as any of them remain. The time of their continuance is uncertain: some have been harassed with them for two or three weeks; and others for as many months; and, in a few, they have ended only in death.

The hectic fever is never less formidable than when it is occasioned by a well-conditioned suppuration, in which all the injured parts are resolved into matter so circumstanced as to be readily discharged from the body.

Inflammations of scirrhoue glands in the breasts, or in the interior parts, sometimes yield to remedies, or to nature, and together with their cure, the fever, which depended upon them, ceases. But these diseased glands much oftener end in cancers and gangrenes; and the fever continues as long as any life remains.

It cannot be supposed that a fever arising from so many different causes, and attended with a great variety of symptoms, should always require, or bear to be treated in the same manner.

As the hectic is always occasioned by some other disease, whatever most effectually relieves the primary malady must be the best means of relieving all its natural attendants. When the fever has been the consequence of some small wound, a mixture of opium and assafœtida will prove an useful remedy. In almost all other cases, the attention of the physician must be chiefly, if not wholly employed, in removing the urgent symptoms. A cooling regimen will temper the heat, when it is excessive; the bowels must be kept nearer to a lax than a costive state; sleep, if wanted, must be procured by opium; profuse sweats may be moderated by a decoction of bark and elixir of vitriol; beside which, the greatest care must be taken that the air and food, and exercise, may be all such, as will be most conducive to putting the body into the best general health. After doing this, the whole

hope must be placed in that power, with which all animals are endowed, not only of preserving themselves in health, but likewise of correcting many deviations from their natural state. And in some happy constitutions this power has been known to exert itself successfully, in cases that have appeared all but desperate. For some patients have recovered from this fever, after there had appeared very great signs of its arising from some viscus incurably diseased, where every assistance from medicine had been tried in vain, and where the strength and flesh were so exhausted, as to leave no hopes of any help from nature. In this deplorable state, a swelling has been known to arise, which, though not far from the seat of the primary disorder, yet could not be found to have any immediate communication with it. This tumour has at length suppurated, in consequence of which the pulse has grown calmer, some degree of appetite has returned, and all appearances of distemper have gradually lessened, till the strength and health were perfectly restored. What in some very few instances I had observed nature thus to effect, I have endeavoured to imitate, by applying a blister, or by opening an issue, or seton, near the apparent seat of the internal mischief; but the success has not answered my expectations.

Not many years ago, in some fortunate recoveries from mortifications, the Peruvian bark had been prescribed, and had the credit of the cure: since which time it has been very generally used by practitioners in all tendencies to gangrenes, and where suppurations had not proceeded in a kindly manner. There is every reason to believe, that it may safely be employed in such cases; and no other remedy is known, which has any pretence to rival it for these purposes. Besides, as the hectic fever is so very like an intermittent, even where there was no suspicion of any gangrene or ulcer, the desires of the sick, or of their friends, for trying the bark, have been too importunate to be controlled; and physicians have sometimes prescribed it from their own judgment. But it has greatly disappointed all expectations of benefit to hectic patients; for it seems to have no efficacy, where there is no ulcer; and indeed it has so often been useless in mortifications, that there may be some doubt, whether in the prosperous cases the cure were not owing to other causes.

But though I dare not be confident that the Peruvian bark has any extraordinary virtues in stopping the progress of mortifications; yet I can have no doubt that it may safely be used: for neither in these cases, nor in any other, have I ever had reason to suspect its doing harm, unless it can be said to do so when it occasions a sickness or diarrhoea, where the stomach happens to be weak, or the dose has been too great, or where it has been taken in hard boluses, which were not readily dissolved in the stomach: and I remember to have heard Sir Edward Hulse say the same, who had for above forty years been giving as much of it as any physician in England, and probably much more than any one had given in all the other countries of Europe. Experience every day more and more confirms this testimony in favour of the bark: and hence it must have happened, that the

quantity of it used in England for the last ten years, is ten times greater than it was in the same length of time in the beginning of the eighteenth century. It is evident, therefore, that the more we know of this noble simple, the less reason we find for those suspicions with which it was at first calumniated ; so that it affords some exception to the general rule, *ubi virtus, ibi virus.* Yet we are told, that many physicians are still afraid of ever giving it in the beginning of an intermittent ; and some are afraid of ever curing it at all with this remedy. They may perhaps adhere to the doctrine (which I believe is founded in error,) that an intermittent is an effort of nature, by which the constitution frees itself from many hurtful humours, and from the rudiments of many impending diseases ; and consequently where these friendly exertions are checked, those dangerous maladies will fall upon the internal parts, terminating in fatal dropsies. I suspect these groundless fears have had their origin from those fevers, which were falsely judged to be intermittent, when in reality they were hectic ; and that the obstructions in the abdominal viscera were not owing to the bark, but were the original cause of the illness.

In all chronical disorders which yield to no other remedies, it is usual for the sick to be urged by their own hopes, and by the advice of their friends, to make trial of the Bath waters. Now the inconveniences of travelling and of missing the comforts of their own houses, must occasion some additional sufferings to the sick ; and for these the hectic patients can have no just hopes of having any amends made them by going to Bath : on the contrary, those waters would not fail, by heightening the fever, to aggravate all their complaints, and to hasten their death.

CHAPTER XL.

Fistula Ani.

FISTULA ani, scirrhi, and ulcers of the rectum, are often attended with griping pains, tenesmus, a want and difficulty of making water, a difficulty of retaining the stools, mucous and bloody stools, the stools always loose, or not round but flattened, shiverings, a swelling, and sometimes a gangrene of the testicles, flying pains, and sometimes very acute and fixed ones in a distant part of the limbs.

The ulcers which are formed in the rectum near the sphincter ani are often neglected, upon a supposition that they are only piles ; though the pain of the previous inflammation be far greater, and much more increased by coughing and sneezing. Even after the suppuration has been made, and the ulcer is broken, the discharge from it, if not great, will still be undistinguished from the piles ; for a moisture has for a considerable time continued to ooze out from them, where experienced surgeons upon examination have not been able to find any ulcer. However, where the pain is excessive, or there is any purulent discharge, the opinion of a surgeon is indispensably necessary ; for, if there be an inflammation or ulcer, the whole

care of it belongs to him, and the sooner he is employed, the better it will be for the patient. A timely use of the proper means may hinder the forming of deep sinuses, which cannot perhaps ever be brought to a healing condition, or not without a much more painful operation than the cure would at first have cost.

Fistulous sores of the rectum will remain unhealed, and keep discharging like a fontanel for a long time: one has done so for more than thirty years. In some constitutions a previous unhealthiness may make a deposit upon the intestine; in others perhaps a neglected ulcer, arising from slight, and merely local causes, may in time taint the whole body. Whether then we consider the fistula as the cause, or as the effect, it is certain that a bad state of health is often joined with a fistula ani, and the mischief, after the cure of the ulcer, has many times fallen upon other parts, and particularly the lungs, and has brought on asthmas, spittings of blood, and consumptions. For this reason it is a common, and appears to be a reasonable practice, to make an artificial discharge by an issue, as soon as the wound is healed, in order to drain off any of those diseased humours, which at first occasioned the mischief, or were afterwards occasioned by it; and to recommend such a regimen as a consumption requires.

CHAPTER XLI.

Fluor Albus.

THE fluor albus is a weakness which has been known to incommodate females in every year of their lives, from the first to extreme old age; but it is very rarely observed in children, and most usually is first heard of about the time of puberty.

This discharge, though generally white, as the name imports, and thin, yet has sometimes had almost a jelly-like consistence, and not unfrequently a tinge of yellow: in a few women it has been greenish, with an offensive smell. The sharpness of the humour frets the parts, if not duly washed, so as to occasion heat, itching, or soreness, and the urine of course will occasion a little smarting. It is evident from this account, that great attention is necessary to distinguish this disorder from a Venereal infection, wherever there is a possibility of its having been communicated. When a woman has lived entirely free from the fluor albus, or has had it only in a slight degree, and all at once, upon cohabiting with a man finds a great pain in making water, and the discharge suddenly appear, or greatly increased, with a deep yellow or greenish hue, there will be strong reason to suspect an infection. It unluckily happens, that a woman soon after marriage is particularly subject to this disorder, especially if she be of a weakly make, which has often created great uneasiness, and many disagreeable suspicions: in these circumstances much caution is necessary in passing judgment upon the nature of the discharge. If the colour of it remain white, or at the deepest is only of a faint yellow, and the smarting of the urine little or none, there will be no reason to be-

lieve it more than a simple weakness, even though the person should never have experienced any thing of it before.

The most common cause of this malady is frequent miscarriages, or lyings-in. It has made its first appearance, or been increased, in many women during a state of pregnancy ; yet I have met with one, who thought herself freer from it at that time. This flux has in many instances returned every month instead of the menstrual one ; or has continued without ceasing during an obstruction of the menses, and is not unusual in elderly women just after their final disappearance. A too profuse menstrual evacuation, and this, will often harass the same subject, both of them being perhaps owing to too great weakness. Too violent exercise, the lifting or carrying of too great weights, intemperate venery, great disturbances of mind, and a weakly or strumous habit of body, have been no uncommon causes. Whatever may have been its origin, the patient is sure to find it accompanied with a great pain of the loins, and this is not the least part of their sufferings. Such a constant drain must probably in some measure lower the health and strength, but it is not easy to point out any other ill consequences. We meet with many women who have had it for a great part of their lives, and have not been hindered by it from bearing healthy children.

Where a weakness of the whole habit, or a partial one of the glands which supply this humour, are judged to be the only causes, the remedies must be calculated to make the whole body more robust, or to strengthen the parts concerned. A powder made of olibanum and Seville orange peel, each ten grains, with five grains of oak bark, taken twice a day, and washed down with an infusion of Peruvian bark, has had a good effect ; and so has a decoction of oak bark, in the proportion of one ounce to a quart of water, injected into the vagina night and morning. These together with cold bathing have proved the most powerful helps. But this disorder, though not dangerous, is often very obstinate from the length of time it has lasted, or from some constitutional weakness ; and will only admit of being checked, and lessened, but never will be entirely cured. Besides, in strumous habits it is not merely a weakness, but a drain by which part of the noxious humours is carried off : this creates an additional difficulty of curing it, and an impropriety of attempting it merely by strengthening remedies. Where such have been used in these cases, and have either stopped or considerably lessened the discharge, the patients have presently complained of pains of the stomach, and have found a general illness, by which they were far more hurt than by the former flux. To such patients injections must not be prescribed ; instead of which, together with internal strengthening medicines, they should twice a week take some gentle purging waters, or some of the neutral salts dissolved either in water, or in an infusion of Peruvian bark. Bristol water has the reputation of being useful in this complaint, which I have no reason to think it deserves. I have known cases in which saccharum Saturni had been used without effecting a cure ; but if it had been

ever so successful, the consequences of taking such a dangerous substance would have been far more prejudicial than the distemper.

Excruciating pains of the womb and hips and thighs, which belong to an ulcer or cancer of the womb, together with the sanguous and bloody appearance of the gleet, will generally be sufficient to distinguish it from the fluor albus.

CHAPTER XLII.

Gonorrhœa Mitis.

A GLEET in men resembles the fluor albus both in its nature and cure; so that very little needs here be added to what has been already said under the last article. Such a weakness is far less common in men, than in women; being hardly ever known in them, without being owing to Venereal diseases. However, I have been a witness to two or three cases, in which a blow had brought on a copious discoloured flux, exactly resembling that from a Venereal infection, except that it went off spontaneously in a few days.

Injections into the urethra should be used sparingly, if at all, if I am not mistaken in supposing that the free use of them has been the cause of many strictures, as they are called, of the urethra, attended with an extreme difficulty and excessive pain in making water, which too often prove an incurable torment, and end in a fatal suppression of urine, or a mortification. An abstinence from the causes which brought on the gleet, seldom fails to cure it, or to reduce it so far as never to do any material injury to the health. Yet many timid minds suffer more from their apprehensions of the consequences of this complaint than of any other; and interested people have endeavoured to aggravate those fears, in order to make an advantage of them by the sale of their silly books and insignificant medicines.

CHAPTER XLIII.

Graviditas.

Most of the complaints incident to breeding women are to be cured only by their delivery. Women readily conceive a little before the time of the menstrual flux. Do they more readily at that time, than at any other?

A healthy woman in the fifth month of pregnancy began to perceive a moisture oozing from the nipples, which continued till two days before her delivery; the breasts were then quite dry for six days, but on the fourth day after the delivery they were filled with milk.

I have been told by two married men, that their wives were free from all Venereal appetite; yet they both of them had been pregnant, and had borne several children.

Pregnancy is very commonly accompanied with sickness and with the heartburn : where these two complaints have been excessive, after a variety of means had been used in vain, the sickness has been cured by rubbing in the anodyne balsam upon the region of the stomach, and the heartburn by repeated doses of elixir of vitriol.

A woman not suspecting her condition, went on bathing frequently for the first months of her being with child, and drinking the sea water so as to be purged two or three times every day ; and this was the only time she ever escaped a sickness, which she had suffered in an uncommon degree with all her other children. The juice of oranges and lemons, and plenty of fruit, have also proved remedies for the same sickness.

A violent uterine discharge of blood has continued for six weeks about the sixth month, without occasioning a miscarriage. I knew one, who never ceased to have regular returns of the menstrua during four pregnancies, quite to the time of her delivery.

Consumptive women readily conceive, and during their pregnancy the progress of the consumption seems to be suspended ; but as soon as they are delivered, it begins to attack them with redoubled strength ; the usual symptoms come on, or increase with great rapidity, and they very soon sink under their distemper.

A difficulty, or total suppression of urine, is sometimes occasioned by the weight of the womb pressing upon the urethra, which can only be relieved by the catheter. After a suppression for three days, upon introducing a catheter, five pints of water came away. Large blisters applied to some pregnant women, who were peculiarly liable to the strangury, have occasioned it in so violent a degree, as to endanger a miscarriage.

CHAPTER XLIV.

Hæmorrhoides.

THE veins towards the extremity of the rectum are liable to be surcharged with blood, in consequence of which they sometimes burst, and bleed without any pain, like the veins in the inside of the nostrils ; at other times they swell without bursting, to a considerable size both within and without, and are in great pain even after they have begun to bleed. This discharge of blood is commonly reputed to be wholesome, and the checking of it by forcible means, it is supposed, will occasion headaches, giddiness, pains of the stomach, and even lay the foundation of a broken state of health, some great mischief being deposited upon the vitals by that blood, which should have found an outlet through the hemorrhoidal vessels. Now, we know very well, that in a perfectly healthy state there is no want of this evacuation, and wherever it happens, it may perhaps more justly be called a symptom, than a remedy of any disease.

In many people the veins of the rectum bleed from as trivial causes as those of the nostrils, and there is no harm in neglecting such a hemorrhage. There are several diseases of the abdominal viscera, which put some obstruction to the free passage of the blood through them, and this may probably occasion a breach in the lowest part; so we find that in affections of the liver, hemorrhoidal bleedings are very common, and possibly may give some little relief at the time, but are not likely to contribute at all to the cure. Bowel disorders too often prove fatal; and if the bleeding of the piles should have been checked by any applications, the mischief may falsely be attributed to the want of that evacuation. I have heard a few persons say, that a headache, an asthma, a giddiness, a redness of the face, and a pain of the stomach, had been prevented, or removed, by bleeding piles. There is some difficulty in determining whether they were mistaken, which might easily happen; but certainly the benefits of the piles are by no means so frequent, and so evident, as to make any one either wish for them, or be pleased with having them. There is however no very great use in deciding the question of the wholesomeness of the piles, the bleeding being seldom so excessive as to threaten either present danger, or future mischief. Yet in rare cases I have known so great a flow of blood from them every day for a month together, that it unquestionably weakened the patient. But even in this state of the piles, it is hardly ever found necessary to go beyond the use of half a pint of the decoction of the bark taken at three or four times every day, which perhaps acts less as a styptic, than by obviating the ill effects of such profuse bleedings.

The piles spare neither sex; they have begun as early as at the age of five years; but they very seldom molest children, and may rather be considered as the disorder of adults. Women during the state of pregnancy, and just after the menses have finally left them, are peculiarly subject to the piles: at all other times they are less troubled with them than men.

The piles are habitual in many constitutions, and have continued through life with no great interruption. Both costiveness and purging will irritate them. They will not only bleed at every stool, but a serous moisture will constantly ooze out spontaneously without any ulcer. The blood does not appear intimately mixed with the excrement, but lying upon it. The pain is greatly increased by going to stool, and will last for some hours after. A heat of urine, a sickness, and pain of the loins, are sometimes, though rarely, complained of together with the piles. Aloes is carefully avoided in this disorder, as a purge which particularly irritates the rectum, and not without some little reason; but it appears to me, that it has not such an effect so generally, and so strongly, as is commonly imagined; and it will therefore often disappoint those who, having a persuasion of the salutary nature of the piles, endeavour in some cases to bring them on by giving an aloetic purge.

In all hemorrhoidal pains and bleedings, the body should for evident reasons be kept in a state rather inclining to laxity than cos-

tiveness ; flowers of sulphur in the quantity of ten or fifteen grains have the reputation not only of effecting this in a gentle and proper manner, but of having some further power of soothing the pain and lessening the discharge : however, it is so doubtful whether sulphur have in this disorder any other virtue than that of a laxative, that there might perhaps be safely substituted for it a little lenitive electuary, or a spoonful of castor-oil, or half an ounce of tincture of senna mixed with one ounce of oil of sweet almonds, all which I have seen used with an equally good effect.

The pain is sometimes so excessive as to require immediate relief, and this may be procured by means of a cataplasm of bread and milk with a little oil ; or, in a less troublesome way, by keeping the parts anointed with a mixture of a dram of the softened extract of opium and two ounces of any simple ointment. No facts have satisfied me, whether opium act in this case as a topical anodyne, or in its usual manner of affecting the whole nervous system when applied to any part of the stomach or intestines. The pain, if occasioned by immoderate distension of the veins, will be lessened, or cease, upon their being emptied either by the point of a lancet, or the application of leeches. I have two or three times been assured by hemorrhoidal patients, that a pint of an infusion of box leaves taken night and morning has greatly contributed to their cure ; but I have never recommended them, because the helps above mentioned appear sufficient to do every thing that is required, and with as much expedition as the nature of the case will admit.

CHAPTER XLV.

Hernia.

RUPTURES require no other remedy, than a proper bandage, or truss.

CHAPTER XLVI.

Hydrocephalus.

THE heads of children sometimes grow enormously large, the sutures give way, and the membranes of the brain are pushed up with the water within, and make a soft tumour rising above the edges of the sutures. This disorder happens to weakly children, and has been growing upon them above a month. They daily become more and more stupid, with a pulse not above seventy-two. They can hardly be got to take any thing for the last week, even out of a spoon, and seem to have no sense, and hardly utter any sound, and have frequent little convulsions.

Upon opening a child who died in this manner, half a pint of water was found in the ventricles. I have no experience of the use

of any other means than purging and blistering, and these have not succeeded. The subjects of the hydrocephalus are chiefly children of both sexes, from the first to the eighth year of their lives. Pains of the head, the hands frequently lifted up to the head, sudden exclamations, convulsions, stupidity, deliriousness, a slow pulse, and lastly blindness, usually attend the hydrocephalus, and make it suspected, even without any unnatural enlargement of the head; but still these are not constant and infallible signs of a dropsy in the head. No unusual quantity of water was found in the head of a child, who died after suffering all these complaints. An adult was seized with intolerable pains of the head, sometimes had a voracious appetite, and sometimes none, became delirious, convulsed, stupid, and died: the ventricles of the brain were found so distended with water, that as soon as a puncture was made the water flew out to a considerable distance.

CHAPTER XLVII.

Hydrophobia.

I HAVE seen a considerable degree of the hydrophobia in one whose throat had been much inflamed, and was suppurated: but I never saw a case, in which it was the consequence of the bite of a mad animal.

CHAPTER XLVIII.

Hydrops.

SWELLINGS of the ankles or legs towards evening, which vanish, or are greatly lessened in the morning, are very common in women while they are breeding, and in hot weather; and in both men and women, when they are recovering from a long illness, and in old age, and after the gout, or any hurt of the legs. These swellings cease of themselves, or continue without any danger, and therefore require no medicine. But where persons after having laboured for some time under complaints of the lungs, or of the bowels, begin to find a swelling in the legs, it is a sign of some deep mischief in the breast or abdomen, the swelling will most probably increase to a just dropsy, and the case end fatally.

A dropsy is very rarely an original distemper, but is generally a symptom of some other, which is too often incurable; and hence arises its extreme danger. Water has often been found in the thorax; but there do not appear to me any infallible signs of a hydrops pectoris. The nature of this part hinders the swelling from being perceived externally, and the respiration is not oppressed by the water in a manner so different from what it is by other causes of the asthma, as to afford indubitable signs of its presence.

A collection of water in the belly shows itself by the swelling, and

by the particular feel upon gently pressing the belly with one hand, and hitting the distended integuments with the other, by which it may generally be distinguished from pregnancy, or wind, or any enlarged solid viscus or gland: yet I have known very experienced persons mistaken in some extraordinary cases. The water in the belly, called an ascites, is frequently contained in a cyst formed from a diseased gland. In women the ovaries very often become the seat of the dropsy, which I have known to continue at least ten years with not much more inconvenience than the bulk and weight must necessarily occasion, this part being perhaps less necessary to life than most of the bowels. I judged it to be the seat of the dropsy by its beginning in the region of one of the ovaries. This dropsy, and some others of the abdomen, will not be accompanied with swelled legs. A very tormenting thirst attends the dropsy most usually, but not universally. In every ascites, where the water is contained in a cyst, or cavity of the abdomen, it is not easy to comprehend how it should ever get into the legs and thighs, after the body had been long in an upright posture; and perhaps it never does; the swelling of the legs being occasioned by the great weakness brought on by the distemper, is more properly of the anasarcaous kind, arising from the fluid deposited in the cellular membrane, and not derived from the water in the cavity of the abdomen.

It is found a matter of great difficulty to carry off this stagnating water, either by purging, or by increasing the urinary secretion, and still harder to do it by sweat; and when this has been done, it is oftener a relief than a cure; and if no further help can be given by nature, or art, towards removing the original distemper, the patient will remain in as much danger as ever. Great care must be taken in ordering purges for these patients, who are always much weakened by the distemper; and not to persist in purging them longer than their strength will well bear. When they are capable of bearing such a powerful medicine, I choose to begin with one, two, or three grains of elaterium, which may be commodiously taken in one spoonful of brandy, or any strong distilled water. If the first dose evacuate much of the water, without occasioning too great a ruffle, and so encourage us to proceed, it may be repeated twice a week, till the water be all carried off; on the intermediate days some cordial bitter will be the proper medicine. By this method I have cured four or five dropsical patients, one of whom continued in tolerable health for fourteen years. Gamboge, in the quantity of half a scruple, may be used in the same manner. These rough purges cannot always be borne or continued, and then recourse must be had to the milder, with a view at the same time of increasing the urine. For this purpose the prepared squills may be tried, from one to as many grains as the stomach can bear; and, if they be given mixed with the grateful aromatic powders, or essential oils, a large quantity may be given without occasioning sickness. Such a medicine may be directed every night, and one dram of diuretic salt in an ounce of tincture of senna every morning or half an ounce of Rochelle salt or soluble tar-

tar ; all these neutral salts being, as far as I can judge, from my experience, equally diuretic.

The weakness of the patient, or his disposition to purging, may be such, as to allow no room for cathartics, and to admit only of help from diuretics. Many medicines have been delivered down from former physicians as possessed of this virtue ; but it must be owned, that their effects are too uncertain, and often so slight, that whoever relies much upon them, will in most cases be disappointed. One scruple of the active balsams has been given as a diuretic morning and night, and so has the same quantity of salt of tartar dissolved in water or in wine, which is a neater way of employing it, than to give infusions of the ashes of burnt vegetables, all the activity of which may reasonably be supposed to reside, not in the insipid earth, but in their alkaline salt, with which they abound, mixed in the ashes of some plants, with a portion of neutral salts. A dram of spiritus nitri dulcis, or twenty drops of tincture of cantharides, have been used three times a day with the same view ; or a spoonful of the expressed juice of artichoke leaves mixed with two or three spoonfuls of Rhenish wine.

When these, and many others which are reputed to belong to the same class, has been tried, as it too frequently happens, in vain, attempts have been made to draw out the water by scarifying the legs, or by applying blisters to them (little blisters will often arise of themselves, without any application, upon dropsical legs), from all which a very considerable discharge is usually procured ; but I have never seen them cure the distemper, though in some instances they have for a small time checked its progress. Both these methods are subject to the inconvenience of making bad sores, notwithstanding the legs are fomented two or three times a day, which also very much promotes the discharge. It is often necessary to let out the water of the ascites by tapping ; the belly being sometimes so violently distended, that the patient seems in danger of bursting, and can hardly breathe. This operation seems to carry off the whole distemper of the dropsy : but there have been very few instances within my experience, where the water has not gathered again, or even where the patient has not died, though the dropsy never returned ; the reason of which is, what was before mentioned, that the dropsy is a symptom only of another distemper, and that most usually a fatal one.

In some very rare cases the original bowel disease takes a favourable turn, and the patient recovers into tolerable health. Among the uncommon occurrences in a dropsy, I have known the tumour subside and vanish in a few hours, by a spontaneous flux of urine in an amazing quantity ; the water by some unknown power of an animal body, having been absorbed from its cyst, and deposited upon the kidneys. An event of this sort, and wholly the work of nature, may have given an undeserved reputation to some reputed diuretics, which had been so lucky as to have it happen during their use.

I have attended a few patients, who from their own judgment and choice have entirely abstained from all liquids ; which they have

been able to do for a much longer time than I could have easily believed (at least for forty days, and some have borne all liquids, as I have heard, for six months), but not with any success, which might encourage others to imitate them. The rubbing of the belly with olive or castor oil night and morning, has been tried with as little success by many, because one or two recovered who had done this. Twice I have observed a dropsy spontaneously disappear. In one case the patient grew apoplectic; and in the other became delirious, and died.

A man had an ascites, which by a spontaneous and sudden discharge of urine, in a very extraordinary quantity, totally disappeared; but his legs continued to swell for some time, and kept him in fear of a return of his distemper. In this state he was seized with an apoplectic fit, from which he soon recovered. From this time he was troubled with giddiness, and slight threatenings of some apoplectic mischief; but for many months had no swelling of his legs, nor any signs of a relapse into the dropsy.

There is one species of dropsy, called anasarca, which often appears without being complicated with any other disease; and this is frequently cured, and the patient left in good health. Though this be for the most part void of danger, yet it is not easily removed; and will for a long time, not only for four or five months, but even for as many years, resist all remedies. Some apparently healthy young persons have had an anasarca; and I have several times seen it in breeding women otherwise healthy, and upon their miscarrying it has disappeared. It has been accompanied in some with an extraordinary flow of tears. I have known it in all ages; but women are more subject to it than men. Gentle purges, with cordial bitters on the intermediate days, are the proper remedies. The scarifying of the legs has effected a cure; and so has an opiate given at night, perhaps by the sweat which it occasioned.

CHAPTER XLIX.

Hypochondriacus et Hystericus Affectus.

FEW persons, if any, have been blessed with such a constant cheerfulness, as not to have sometimes felt a languor and dispiritedness, without any manifest cause, which has cast a cloud over all their pursuits, and has afforded only gloomy prospects, wherever they turned their thoughts. This state I call the hypochondriac affection in men, and the hysterick in women. While this is in a slight degree, and of short continuance, it passes off unobserved by others, and is not much regarded by the sufferer; but when the returns of it are frequent, and strong, and of long continuance, it appears to be a misery much harder to be borne than most other human evils, and makes every blessing tasteless and unenjoyable. It is a sort of waking dream, which, though a person be otherwise in sound health,

makes him feel symptoms of every disease ; and, though innocent, yet fills his mind with the blackest horrors of guilt.

Our great ignorance of the connexion and sympathies of body and mind, and also of the animal powers, which are exerted in a manner not to be explained by the common laws of inanimate matter, makes a great difficulty in the history of all distempers, and particularly of this. For hypochondriac and hysterick complaints seem to belong wholly to these unknown parts of the human composition ; the body itself, as far as our senses are able to discern, seeming to have all its integrity and perfection in those who have long and greatly suffered by these disorders. But there is hardly any part of the body which does not sometimes appear to be deeply injured by the influence of great dejection of spirits ; and none more constantly than the stomach and bowels, which hardly ever escape unharassed with pains, an uneasy sense of fulness and weight, indigestions, acidities, heartburn, sickness, and wind in such an extraordinary degree, as to threaten a choking, and to affect the head with vertigo and confusion : the appetite however remains good, and is sometimes voracious. The urine is most commonly pale, and in great abundance, but not universally. No distemper of the heart occasions greater palpitations, than extreme lowness of spirits, in those where the heart is free from all distempers. Though the lungs be sound, yet the respiration will be performed with all the tightness and oppression of the breast attending on an asthma. A sense of fulness in the throat, and of suffocation, is excited with as little material cause, as far as the senses can judge. Tears flow from the eyes without grief ; the nose and ears are filled with ideal odours and sounds : and a mist will seem to obscure the sight. A giddiness, confusion, stupidity, inattention, forgetfulness, and irresolution, all show that the animal functions are no longer under proper command, and that the mind is controlled by some foreign power. The comforts of sleep are in a great measure denied to these patients ; for they have but little, and in it they are harassed with terrifying dreams. Restlessness, wandering pains, sudden flushings, cold sweats, a constant terror, tremors, catchings, numbesses, contribute to their misery ; which sometimes so overpowers them, that they either sink under it in a fainting fit, or it is with great efforts and struggling that they can keep from it.*

All these symptoms are common to hypochondriac men and hysterick women ; but some of them are less, and some more violent in females, and there are others which seem peculiar to them. They

** How great a confusion of the senses this disorder is capable of producing, will appear by the following history. A gentleman about thirty years of age, without any obvious cause, fell into a great dejection of spirits, which lasted some time. At length, by some perversion of the mind, he seized a razor, and amputated his penis and scrotum. After the wound was healed, he said of himself, it appeared very strange to him that he should have courage to perform such a deed, since he was always at other times of so timid a disposition, that he had great dread even of being bled with a lancet, and could not suffer such a trifling wound without much agitation. Yet he was free from all fear when he attempted this hazardous amputation ; which he moreover told me was done without his being sensible of the least pain. A similar case is related in a book entitled *Medical Communications*, vol. ii., p. 51.

are seldom so low spirited as the men, but are more apt to have their faculties and passions benumbed, being turned almost into statues, unaffected by occasions of joy or grief. They are far more subject to faintings, and to those universal convulsions, which are called hysterick fits, from which the other sex seems to be saved by their superior strength. These fits will be brought on by the slightest affection of the senses or fancy, beginning with some uneasiness of the stomach or bowels. They will last for half an hour, or less, and return frequently every day or even continue for a whole day ; in the meanwhile it is singular, that though the hysterick persons be incapable of speaking, and seem senseless, yet they often hear and understand everything that their attendants say. After coming a little to themselves, or even without falling into a fit, they will sometimes have a slight delirium upon them, which lasts for several hours. Women differ likewise from hypochondriac men in being much more apt to cry, and to fall into convulsive laughter, or to lose their voice, or utter violent shrieks, and in having hiccups, yawnings, stretchings, and other tendencies to convulsions. The hysterick globe in the throat is scarcely ever heard of among men, but is one of the most familiar symptoms with hysterick women.

Man has immemorially been said to consist of *Σαρκα*, *Ψυχη*, *Νοησις*, the body, the animal faculties, and the mind. In hysterick women the operations of the animal powers seem to be most disturbed and perverted ; but in men the mind is the most affected ; involuntary exclamations, faintings, and convulsions of all sorts, being most common in women ; and silent despair in men. Hence, perhaps, suicide is more common with men, than among women.

Some speculative persons, seeing such evident marks of a design in the author of mankind, that human happiness in every state should be nearly the same, have considered low-spiritedness as the means by which the happiness of the rich and idle is reduced to a level with that of the indigent and laborious part of the species. But it is by no means true, that the poor and industrious are by the lowness of their station sheltered from the tyranny of this malady. Some derive it from their parents ; and the seeds of it, brought with them into the world, are sure to make their appearance at the proper time, let the condition of the person be what it may. A dejection of spirits will rob the poor husbandman of the ease and comfort which he should feel when the labour of the day is ended. Neither strength of constitution, nor temperance, nor business, nor the gout, afford a certain security. However, idleness will not only foster a disposition to a languor of spirits, but will unquestionably create it ; and so will the other extreme, of an oppression from too much business. An intemperate use of women, and wine, will likewise be its mother and nurse, as well as too great abstinence in eating. Repeated fevers, excessive purgings, terror, and immoderate grief, are no uncommon causes of its appearance in those who before were strangers to it.

Hypochondriac complaints resemble the gout, and madness, and consumptions, in their not appearing before the age of puberty ; from

which, to the age of sixty, there is no time at which this malady has not made its first visit. There are very few examples of low-spirited persons who find themselves worse at night than in a morning; the generality of them, like most of those who are afflicted with any of the complaints styled nervous, are hurt by their sleep, little as it is; and the longer they happen to sleep, the worse they are; they awake out of it in confusion, and do not come immediately to themselves; and when they do, they can think only of melancholy subjects, and feel the worst horrors of their disorder. This state continues till dinner, with very little abatement: after dinner they feel themselves a little revived; and at night the tide of their spirits returns; which being desirous to enjoy, and dreading their certain ebb when they lie down, they go late and with reluctance to bed.

Three persons employed in examining and smelling tea, have suspected that it occasioned tremors and other hypochondriacal ills.

The seasons of the year have not appeared to have any constant influence in relieving or exasperating a disposition to melancholy. Though extreme dejection of spirits seems so nearly related to epilepsies, madness, and palsies, yet it is not common to see it end in any of these disorders.

It is the condition of this malady to make the patient hopeless of a cure: but neither reason nor experience justifies his despair. For every part of the body, as far as our senses can judge, is whole and uninjured by his sufferings, great as they are; and the mind and animal powers are indeed oppressed, and cannot exert themselves, but their abilities are all entire: Hypochondriac and hysterical persons will look well, and grow fat with their complaints, and have now and then respites from them, in which they have all the sensations of most perfect health. It is well known, that some extraordinary works of genius have been the offspring of the intervals of melancholy. This malady will sometimes cease spontaneously; and I have known it leave a person, without any returns, for near twenty years. Now, what more encouraging circumstances can there be in an illness, than to know that the life is in no danger from it, that it is not incurable, and that, when it is removed, the patient will become as perfectly well as if he had never experienced it?

In the cure of all chronical distempers, it is a matter of great importance to put the general health, by a proper regimen, into the best state possible; by which the self-correcting principle of an animal body will be enabled to exert itself with the greatest vigour; and this, in some diseases, is the whole of what can be done. This therefore must be carefully attended to in a languid state of spirits by avoiding all the general causes of ill health, together with all the particular ones before mentioned, which may be conjectured to have brought on, or to have aggravated this malady.

Evacuations are very ill borne in this disorder; but as it is usually accompanied with costiveness, we need not scruple to give occasionally three or four grains of Rufus's pill, or a small portion of any other gentle aperient so as just to procure one motion every day; for

this will mitigate, or prevent many of the bowel complaints. A gentle emetic may also be sometimes wanted, when the stomach is uncommonly loaded and sick. All further evacuations, and particularly bleeding, scarcely ever fail to heighten every symptom. It is so little in the power of any medicines to give the gout, and it is so uncertain whether the gout would take away the hypochondriac complaints (for in some persons I have known it constantly bring them on), that I think it nugatory to attempt a cure by giving any medicines which are supposed to create or to excite a fit. Bath waters, according to my experience, are at least useless, unless in some extraordinary disorders of the stomach ; and the going thither, or a sea voyage, or foreign countries, can only be advisable when they will remove the patient from a scene of grief, or cares, or too much business. Seabathing, and chalybeate waters, may be serviceable upon the same account ; and may besides, in some cases, improve the general health. The gum-resins, and wild valerian root, and steel, have the credit of possessing a specific virtue in all maladies attributed to the nerves ; my experience of them will not add much to their reputation. The nerves of the stomach and bowels have so great a dominion and control over the whole nervous system, and these parts are so generally disordered in hypochondriac and hysterical patients, that, in my judgment, the best medicines will be such as correct their acidities, and are known by experience to be efficacious in recovering them to their proper strength and functions. This purpose is best brought about by the aromatic and bitter medicines, with which a small proportion of aperients may be joined when they are wanted. These may be given in pills, in drops, in tinctures, or infusions ; and by this variety of forms, and by the small compass in which they may lie, they may easily be continued, as long as may be necessary, without becoming nauseous.

Many in a lowness of spirits are not indisposed to raise them by wine and spirituous liquors ; and they are encouraged and pressed to do it by their well-meaning but ill-judging friends. No words can be too strong to paint the danger of such a practice in its proper colours. The momentary relief is much too dearly bought by the far greater languor which succeeds ; and the necessity of increasing the quantity of these liquors in order to obtain the same effect, irrecoverably ruins the health, and in the most miserable manner. If the anxiety of dejection becomes intolerable, and must have some present relief, it is better to seek it in opium than in wine. A few drops of the tincture of opium, with or without the tincture of asafœtida, or antimonial wine, would be a much safer cordial for the drooping spirits than spirituous liquors ; and might be increased without equal danger of hurting the health, and without bringing on the same difficulty of ever leaving it off again. My experience has often taught me, how safely and consistently with business, a course of taking opium may be continued for a considerable part of a man's life ; and how practicable it is to be weaned from the habit of it : while every body's experience must have shown them the danger of persisting

in a course of drinking immoderately, and the almost impossibility of ever reclaiming a sot.

I would by no means be understood, by any thing which I have said, to represent the sufferings of hypochondriac and hysterick patients as imaginary; for I doubt not their arising from as real a cause as any other distemper. However, their force will be very different, according to the patient's choosing to indulge and give way to them, or to struggle against and resist them, which is much more in his power than he is aware of, or can easily be brought to believe: and it is surely a cause worthy of any one's utmost endeavours and exertions. For his striving to shake off this distemper is not contending about a frivolous concern, but whether he shall be happy or miserable; since it is of the essence of this malady to view every thing in the worst light; and human happiness, in many instances, depends not so much upon a man's situation and circumstances, as upon the point of view in which he contemplates them.

CHAPTER L.

Icterus, aliique Hepatis Affectus.

THE obstruction of the gall-ducts from gall-stones is the most common, but the least dangerous, of all liver complaints; for it admits more relief from art, and is often surmounted by the unassisted efforts of nature.

The bile, from causes not hitherto clearly understood, frequently thickens into grumous lumps, which gradually harden into an almost stony substance. It seems probable that these gall-stones, as they are usually called, are generally formed in the gall-bladder. This, I think, or the ductus choledochus communis, is the place in which they are most frequently found, and often, when the liver is so perfectly sound as probably to have had no share in producing them. At least, it must be owned that the gall-stones acquire their chief bulk in the gall-bladder, though it should be judged that the nucleus comes hither from the liver.

The contents of the gall-bladder are naturally poured through the ductus cysticus and choledochus communis into the duodenum. Together with the bilis cystica the gall-stones readily pass, if they are very small; and if they are large, they sometimes lie quiet in the gall-bladder, without being at all perceived, and sometimes make frequent efforts to get into and pass the gall-ducts; in the beginning of which, or in any part of them, if they happen to be stopped, they of course obstruct all, or most of the gall, that should flow into the intestines, which therefore is forced back into the liver, and thence into the blood, tinging the serum, and consequently the skin and eyes, of a yellow hue, and deepening the natural colour of the urine, so as to make it of a very dark yellow, or brown.*

* The urine of one person in a jaundice, after standing a few hours, changed from a deep yellow to a green colour. The same change may be observed in yellow bile a little while after it has been vomited.

The usual symptoms of the gall-ducts thus obstructed are, loss of appetite, sickness, vomiting, languor, inactivity, sleeplessness, and if the obstruction be continued for a few days, a very great wasting of the flesh. These complaints are remarkable in the obstructed gall-ducts, but they belong to many other diseases. The most distinguishing signs of this malady are, a yellowness of the eyes, skin, and urine, and a want of this colour in the stools. Nor is this disorder much less certainly denoted in some patients, before the yellowness appears, by an exquisite pain about the pit of the stomach, the pulse being at the same time as slow as a natural one: and by an attention to these two circumstances, it is not difficult to foretell the outward yellowness, in many cases, some days before it appears. The slowness of the pulse will almost always distinguish this pain from one which belongs to an inflammation of the bowels; and wherever, together with this pain, the artery beats in the usual manner, the physician will have the great satisfaction of being able to assure the patient, that his pains can be relieved, and that they are not of a dangerous nature.

But this pain, which sometimes is hardly supportable in the jaundice by persons of the greatest patience and courage, rises in others only to a slight uneasiness about the region of the liver, or is not felt at all. This perhaps may be owing to the different parts of the gall-ducts in which the stone happens to lodge. There is great reason to believe that the liver itself has little or no sense of feeling; and it is probable that not more belongs to the gall-ducts. But every day's experience acquaints us how exquisitely this sense belongs to the intestines. It may therefore be, that little or no pain is felt while the stone is forcing its way through the gall-ducts, till it come to the end; but in stretching that part which is inserted into the duodenum, the intestine is, by a large or angular stone, distended or irritated, to a degree which may account for all the torture that ever attends the jaundice. This pain seldom lasts, without intermission, above two or three days; but I remember its continuing in one person near a month, without any intervals of ease, except what were procured by opium. Wherever this pain is felt at all, it not only comes before the yellowness, but is sometimes more, sometimes less, sometimes entirely disappears, and then rages afresh, throughout the whole fit of the jaundice.

There sometimes appears reason to suspect a stone in the ducts of the liver, from the presence of all the other symptoms, though there be no yellowness in the eyes or skin; which suspicion has been verified by the voiding of a gall-stone, with the relief of all these symptoms; or after frequent returns of them without any discolouring of the eyes and skin, by having one of these fits end at last in a jaundice. Whether it be, that in these cases the stone is of such a form as not perfectly to fill up the aperture, or that the violent efforts of vomiting, without dislodging the stone, force some bile between it and the sides of the duct.

And as a gall-stone may sometimes be suspected without any

marks of it in the eyes or skin, so this yellowness is said to be found without any gall-stone or preternatural consistence of the bile. It has been supposed that an infraction of the duodenum may be great enough to hinder the efflux of the bile: but this may be questioned, if we reflect that the duodenum has seldom any solid contents in it, and that if it should be so plugged up by them, or compressed by the distention of the other intestines, as to hinder the passing of the bile, it would for the same reason be incapable of admitting any thing into it from the stomach; which is a supposition hardly countenanced by experience.

Sydenham mentions the jaundice as no uncommon symptom in hysterick cases, where there is no disorder of the gall or gall-ducts. No reasonable deference to this accurate observer can make any one much doubt of his having been mistaken, because nothing like this has occurred to very many other practitioners, as they have assured me, though hysterick complaints be so very frequent: and it requires but a very moderate understanding to see, after it has been pointed out, what could not have been discovered but by one of superior sagacity.

A perfect jaundice is said by physicians of unquestionable authority to be an attendant upon some fevers, and particularly upon the yellow fever of the West Indies. It is also said to be produced by the bite of a viper. And in these cases it is judged to be owing to a convulsive stricture of the duodenum. Of all which I am no judge, as I have never seen these disorders. There is in many exhausted and cachectic persons a skin almost of the colour of a lemon, in which the bile is not concerned; but then they have not yellow eyes, and dark urine, and ash-coloured stools, which I have never yet happened to see, without the strongest reason to suspect the gall-ducts obstructed by bilious concretions, or scirrhi.

It has long been a prevailing opinion, that every object appears yellow to the eyes of a person in the jaundice:

“*Lurida præterea fiunt, quæcumque tuerunt
Arquati:*”

is the assertion of Lucretius;* and the same has been allowed by some physicians. Now, though the tunica conjunctiva be tinged with this ail, yet, as the milk in the breast preserves its whiteness, it is not probable that the much finer humours of the eye, through which the light is transmitted to the optic nerve, should ever be infected; nor if they could, would it thence follow, that all objects would appear yellow: accordingly all the jaundiced patients, whom I ever asked, have unanimously denied the truth of this pretended fact; excepting two women, whose testimony was very suspicious.

The duration of the jaundice is extremely various, and uncertain. In some patients it will disappear in two or three days; in others I have seen it continue near a twelvemonth, before the gall-stone could pass into the intestine, or fall back into the gall-bladder: nor will this long obstruction of the natural course of the bile have any

* Lib. iv., ver. 333.

lasting ill effects, or hinder the patient from being soon reinstated in perfect health, after the removal of the obstruction. I have known the jaundice return frequently for more than twenty years in some persons, who have had good health in the intervals of the fits.

There is no limit to the possible size of gall-stones, except the capacity of the gall-bladder; and they are found of all intermediate magnitudes between this and the minutest dust. When the gall-stone becomes too large to enter the duct, it is probable that its lying in the cystis may be attended with some, though I know not what, inconvenience; but it is often, we are sure, a very slight one; for many have been opened after their death, in whom a very large stone, or many small ones have been found without their ever having had in their life-time any complaint, which could certainly be imputed to this cause.

I attended a woman, who for five years laboured under all the usual symptoms of the jaundice in the highest degree. In the sixth year she voided a gall-stone like a small olive in shape and size; after which she enjoyed good health for many years without any return of jaundice, or the appearance of a disorder which could be imputed to her once having had it. The passing of such large stones shows what great efforts nature is capable of making towards freeing itself from such an incumbrance. The natural size of the gall-duct hardly exceeds that of a goose-quill; and a force may be exerted which will distend this narrow passage so as to let a stone pass, the smallest circumference of which equals two inches: I speak only of what I myself have seen: others give us accounts of the passing of much larger. In the gall-duct of one woman, whom I had attended, there was found after death a gall-stone as big as a small hen's egg.

I have had an opportunity of examining the gall-ducts of some, whom I had frequently seen in fits of the jaundice; and I found them much distended beyond their natural diameter throughout their whole length, but very unequally. The same appearances are very common in the ureters of those, who have had many stones pass from the kidneys to the bladder. The liver of these persons, though they had for many years suffered frequent fits of the jaundice, was perfectly sound.

It is frequently recommended to the attendants upon icteric patients to examine their stools, in order to find the gall-stones, and there can be no reason to hinder them from doing it; but the other signs of this disorder are so certain, that the finding of a gall-stone will add very little to the evidence for the nature of the disorder, and will be of no use to the cure. For whether a gall-stone be found or not, the method of cure must be continued as long as the symptoms remain, by which alone the physician must be directed. Let there be ever so many gall-stones found, if the patient be not relieved, it must be supposed that more remain: and consequently the same medicines must be continued: and, on the other hand, though there be none found, if all the complaints cease, the proba-

bility is that the stone is fallen back into the cystis, and therefore little or nothing more is to be done.

Some gall-stones, which I have weighed, have been heavier than water, and others have been to water as nine to ten. They melted also by heat, and were inflammable. I have examined only a few in this manner ; and possibly there may be a great difference between these and others, in the texture and materials of which they are composed : most of what I have seen were of a dark brown colour ; but some have been almost white externally, though brown within.

A very troublesome itching, but without any eruption, is often observed in the jaundice : this is supposed to be owing to the irritation of the skin from the acrimony of the bile mixed with the blood : but it is not easy to say, why this, or any other cause, should make this complaint so exceedingly distressful to some, whilst it is not at all felt by others.

In a simple jaundice, without any apparent disorder of the liver, or other viscera, a hiccup will now and then join itself to the other symptoms, but without denoting any present or future mischief.

It might naturally be expected, that the want of irritation from the bile should make icteric persons costive ; but in fact they are often disposed to have a purging. Certainly neither of these states is peculiar to their distemper ; and the spontaneous diarrhoea, or the readiness with which a costiveness is removed, may help to distinguish it from the ileus.

In other disorders of the bowels, it is a very alarming symptom, to have the patient subject to fits of shivering : but very strong ones now and then happens in the jaundice, and last an hour, and return every day for two or three times, without being followed by any other complaint. It is difficult to guess satisfactorily at the cause of this : but whatever it be, I have suspected that this symptom happens at the time of the stone's passing into the intestines. However, neither suppuration, nor gangrene, nor any other mischief, needs be apprehended from this shivering.

It is not constant in this malady, but it is far from being uncommon, to have all solid food taste bitter ; and sometimes, though more rarely, the same is true of liquids. I knew one, to whom all liquids, and solids, tasted bitter, except oysters.

The milk of icteric women, who suckle children, is not tainted with the bile, either in its colour or taste. I remember to have seen a woman, who with a very deep jaundice had been for six weeks suckling a child, who sucked with eagerness, and was healthy and robust. One man assured me his tears were tinged in a jaundice.

Infants, and children of all ages, are subject to the jaundice : but they have it in a slight manner, and soon recover from it ; and it does not, as far as I have observed, do them any hurt. Men and women seem equally liable to this malady : in a continued succession of a hundred patients, I counted fifty-two males, and forty-eight females.

They who have once had this distemper, are very liable to returns

of it; not only because other gall-stones are likely to be generated by the same causes which formed the first, but likewise because a fit of the jaundice is frequently terminated, not by the passing of the stone into the duodenum, but by its falling back into the cystis; at its passing out of which it occasions a fresh fit; and many may be thus caused by the same stone.

A jaundice, caused merely by an obstruction of the gall-ducts by a stone, is usually void of all danger; so that many people are not hindered by it from doing all common business of life, where no great exertion of strength is required.

Very different is the danger in diseases, which properly belong to the liver itself. This viscus seems in some instances to have been seized with a sudden and violent inflammation, joined with a fever, and with signs of immediate danger; which are neither followed by a speedy death, or by a lingering one, after an unkindly suppuration, which though more slowly, yet is scarce less certainly fatal. Such an inflammation perhaps more usually begins in some of the parts to which the liver is contiguous, and is communicated to it from them. But what I have conjectured to be this distemper of the liver has rarely occurred to me, in comparison of that which begins here, as in other glandular parts, with a small scirrhus, which gradually spreads itself over its whole substance, and, I imagine, just in the same manner as it happens in the breasts of women.

These scirrhi by fits inflame, whence a fever is raised, and the health in many respects much discomposed. This fever retreats on the abatement of the inflammation, and the patient is encouraged to hope for a recovery; but his hopes are usually vain; the intervals between these inflammations becoming shorter, the appetite, flesh, and strength decreasing with a little cough and hiccup, which sometimes without, and often with a dropsy, bring on death; towards which the progress in different patients is so unequal, as either to take up several years, or to be finished in a few months.

The liver, having but a very dull, if any, sense of feeling, if the inflammation be confined to the interior parts, it will hardly be attended with any pain; which, as I suspect, is never perceived, but when an ulcer, or inflammation of the surface of the liver, catches the diaphragm, intestines, or parietes of the abdomen. In this state of the liver the patient choose to lie on their right side.

A pain of the right shoulder is common in liver cases; but on what circumstances it depends, no observations have yet ascertained to me; nor whether it belongs to a mere obstruction of the gall-ducts, or only to scirrhoue inflammations of this part; which last I rather suspect.

In the advanced state of these scirrhi, the blood will gush out in great quantities from the nose, the gums, the stomach, the navel, and with the stools; which is probably to be attributed to the obstruction which it meets with in the scirrhoue liver.

The worst of these cases, of which I have satisfied myself by seeing the bodies opened, will sometimes, throughout their whole course,

show no signs of jaundice ; that is, though the complexion may be of a leaden colour ; yet the skin and eyes and urine will be free from the jaundice-tincture, and the stools will not be ash-coloured. The reason of which may be this ; that the diseased parts of the liver are so situated, as not to intercept the course of the bile in its passage from the sounder parts of the duct.

An indurated liver is often very evidently distinguishable by applying the hand to the region of it : and this affords another certain sign of its diseased state. These are the only peculiar signs, that this viscus is the seat of any malady ; for the quick pulse, hiccup, sickness, and averseness from food, equally belong to the distemper of the liver, and of many other viscera. I doubt indeed whether it be of any great moment to be able to decide with preciseness, whether the ail be here, or in the pancreas, or spleen : for I know of no remedy peculiarly or specifically appropriated to this state of the liver ; and there is not much more to be done in it, than what the common cure of the hectic fever requires, whether the fever arise from this, or from any other cause.

It is probable, if a small part only of the liver be scirrhouſe, that it may, by a cool regimen, and by assisting the general health, be kept for many years from spreading.

Where frequent inflammations, with a considerable degree of fever, cannot be prevented, there the flesh and strength more rapidly decrease ; and if the inflammation be great enough to occasion a suppuration, the only chance of a recovery is from the breaking of the abscess in such a manner, as that the matter may be carried off by the hepatic duct, or when the inflammation of the liver has made it adhere to the parietes of the abdomen, in which a tumor forms, and is opened, or burst, externally. I have known one or two recover in such circumstances, but more who have sunk. In some, a great abscess of the liver has appeared to have made its way preternaturally into the stomach, or bowels ; and immediately, upon the bursting of it into these parts, the patients void, by vomiting and purging, a most offensive matter, filling a whole house with its noisome smell, and die in a few hours.

A woman fifty years of age was for ten days severely afflicted with pain of the stomach, hiccup, purging, and faintings, and with difficulty struggled through it. A month after there arose a swelling near the navel, which was opened, and discharged a great quantity of yellow fluid for the space of four years ; at length the pain increased, together with sickness, and shivering, and after a few days there was discharged a gall-stone three inches long, and as much in circumference, weighing 245 grains. During the two following weeks a thin liquor was poured out in great abundance : soon after the sore healed up, and the woman recovered. It is evident the gall-bladder must in this case have inflamed and suppurated.

A sudden inflammation of the parts contiguous to the liver, by which it would soon be affected, or possibly of the liver itself, may be occasioned by any of the causes to which pleurisies and similar

disorders are owing. The more chronological diseases of the liver, which begin with small scirrhi, arise sometimes from the same ill habit of body which occasions scirrhi in other glandular parts, or from a blow ; but the most common cause is an intemperate use of spirituous liquors, which specifically hurt the liver, far more than they do the stomach, to which they are immediately applied, or than they do any other of the bowels.

Men are more commonly affected with scirrhoue livers than women, because they are more given to intemperate drinking, which is the principal cause of this disorder.

Bath waters are in no cases more useful, than in remedying many of the injuries done to the constitution by drunkenness : but where the liver is become scirrhoue, and a hectic fever shows these scirrhi to be in an inflamed state, there the Bath waters will aggravate all the symptoms, and contribute no otherwise to end the disease than by hastening the patient's death.

In the cure of those whose gall-ducts are obstructed by biliary concretions, the first thing to be attended to, is the pain ; which is often so excessive, that nothing else ought to be attempted, before this is relieved. Bleeding is here of no use, and should therefore be forbore as a needless waste of strength. This pain can only be assuaged by giving and repeating opium, or its preparations, as often as the continuance of the pain requires them. And because this pain is very apt to return, the patient should always be advised to keep by him, as long as the distemper lasts, pills of pure opium, each weighing one grain, or what is equivalent to them, that no time may be lost in quieting a sensation which it is so difficult to endure. One of these pills may be taken as soon as the pain comes on ; and it may be repeated once or twice in the space of two hours, if the pain requires it. I have found it both safe and necessary to give much more.

Vomiting is commonly the next symptom which demands the physician's assistance. This seems to be an effort of nature to dislodge the stones ; but it may be a question, whether it be such an effort as ought to be encouraged, or checked ; for though on the one hand this violent concussion may force the stone back into the cystis, or forward into the duodenum, and so effect either a temporary relief or a perfect cure, yet it may be feared, if the stone be so fixed in the duct, as not to be easily moved, that the action of vomiting will lacerate the membranous duct, and be the cause of future mischief, as well as of present pain. Now, whether this fear be just, or groundless, can only be determined by experience ; and by what I have observed of icteric cases, it has appeared to me, that a vomit excited, while the pain was intense, has rather quieted than aggravated it, and has never brought it on. But if we be secure of its doing no harm, there is so good a chance of its being beneficial, that, whether the patient have a vomiting or not, it is a judicious practice to order an emetic, either at first, or as soon as the intenseness of the pain has been alleviated, and occasionally to repeat it. To excite a vomiting

in this malady is much more easy than to stop it ; and therefore it is always proper, and sometimes necessary, to order an opiate to be taken after a moderate number of strains have been procured, or if the sickness continue longer than usual.

Similar good effects may with reason be expected from purging medicines, by their increasing the natural motion of the intestines, and soliciting a greater flow of bile, as well as of all the other humours which are poured into them. Mercurial purges have been preferred by some practitioners : but there appears nothing in the known powers of mercury peculiarly useful in dislodging a biliary concretion ; and the preference should be given to those purges which act with the most ease, and may be continued with the greatest safety. Such are the sea-water, the water of many purging springs, as also many of the neutral salts, dissolved either in water, or, if it can be borne, in a weak infusion of some bitter vegetable substance. These, as we know by abundant experience, may be taken for several months, either every day, or every other day, without palling the appetite, or exhausting the strength or spirits. But in some cases there may be reason for using other purgatives ; and I have known a few grains of rhubarb, or one or two drams of tincture of senna, or of rhubarb, taken with advantage in a small draught of some moderately bitter infusion. The jaundice of infants and young children soon yields to a few purging medicines.

If it happen that the jaundice is of itself attended with a purging, there may be nothing further necessary, than by gentle means to prevent its being excessive, and at the same time to strengthen the stomach by proper bitters.

The itching is many times so extremely troublesome, as to require opium ; without the help of which it would be impossible to procure any ease or sleep.

Beside these medicines, which have appeared to me the most beneficial of any which I have seen used, there is a class of bodies which have been trusted to, from a belief that they have a power of dissolving gall-stones. Of this kind are the alkaline salts, lime-water, soap-leys, and various soaps : all which I have tried by steeping gall-stones in soap-leys, and lime-water, and in the solutions of soap, and of the salts ; and it is no wonder, that the others did nothing towards dissolving the stones, when the most powerful of them all, the strongest soap-leys, could only fetch out a slight green tincture from a gall-stone, but neither seemed to lessen its bulk, nor to alter its shape, in several months ; and there is very little likelihood of their being able to do more in the body than out of it. Gall-stones were likewise infused in every one of the acid spirits, without being dissolved in any.

But if we had ever such powerful solvents of gall-stones, it might be doubted whether they could do any service in the obstructions which these occasion ; for whilst they remain in the ducts, or cyst, the solvents cannot reach them ; and when they are come out into the intestines, they want no medicines, but will of course be voided by stool.

It would be very desirable to find out a remedy, which would medicate the bile, so as to make it unapt to coagulate, or enable it to resolve the concretions already formed; and such there may be found hereafter; but though this has been pretended of several, I have no reason to think it true of any; and as we do not yet know any which may be safely taken, which can dissolve gall-stones, it is not likely that we know anything which will make the bile dissolve them.

I attended a person, who for a stone in the bladder of urine had been in a course of swallowing an ounce of soap every day for seven years. His distemper and advanced age having made him retire from all the business of life, and he being naturally constant in what he undertook, I imagine there could be very few days, and I do not know that there were any, on which this medicine was omitted. His body was opened after his death, and, notwithstanding such an extraordinary quantity of soap had been taken, a great number of stones were found in the gall-bladder, which showed no sign of having been acted upon by any solvent.

The only use of soap and alkaline salts in a jaundice, as far as we can reason upon their probable virtues, is, to make amends for the deficiency of the bile, which they resemble, in digesting the food, and cleansing the bowels. But too much stress must not be laid upon this reasoning; for I have known large quantities of an acid, such as lemon-juice, taken by some icteric patients, with so much apparent benefit, as to have gained the credit of the cure.

A very judicious physician assured me, that he had seen extremely good effects in an inveterate jaundice from a scruple of volatile alkaline salt given three or four times a day; and he seemed to be convinced, that, besides the virtues just mentioned, it had some peculiar or specific ones in the cure of this disease.

Specifics for it are to be met with in great abundance among medical writers, many of which manifestly owe their reputation to inconclusive reasoning, or to fanciful criteria of the virtues of medicines; others are unsupported by well-attested experience; and I have no reason, from what I have observed, to think the testimonies in favour of any of them deserve to be examined, or mentioned.

The waters of Bath have some credit of being serviceable in a jaundice. But it must be observed, that icteric patients generally recover wherever they are, and it may be doubted whether they recover the sooner for the use of these waters. However, there can be no medical reason for dissuading any one, in a simple jaundice, from going to Bath; because the waters are perfectly safe, and the proper medicines may be taken there, as well as any where else; while the vacancy from care in such public places, together with the change of air, and water, and objects, may be of some use to the general health, and thereby facilitate the cure of this, as they often do of many other chronical disorders.

Before I conclude, it may be of some use to observe, that biliary concretions are probably one cause, amidst various others, of that

commonest of all complaints, an uneasiness, or pain, as it is called, of the stomach. This I have been induced to believe, from finding that in many persons a pain of the stomach, which had frequently afflicted them for months, or years, has at last been joined by a jaundice. When therefore a pain of this kind frequently returns, without any other manifest cause, especially if there be at the same time a sensation of fulness, a thickening of the bile may generally be suspected ; and gentle vomits, and a course of purging waters, or any other mild purgatives, will prove the most effectual cure.

CHAPTER LI.

Ileus.

THE ileus, or inflammation of the bowels, has for its subject chiefly adults, and especially those who have ruptures, or who perhaps from some less apparent, but equally unnatural situation or conformation of the bowels, have often been afflicted with colicky pains. Yet childhood is not exempt from this very dangerous disorder : some have died of it in their sixth or seventh year with all the usual symptoms ; and it is not unlikely, that this may make one of the many bowel disorders which are so fatal to children for the first three or four years of their lives.

It begins with a pain usually referred to the stomach or the bowels : this sometimes comes on suddenly, and with violence ; or from small beginnings gradually increases ; and in rare cases has even seemed to abate for a few days, and then has returned never to yield again to any remedies. The navel has been complained of, and so has the back, as the chief seat of the pain, even in those who have had inguinal ruptures ; which have undoubtedly been often the original cause, but, as I suspect, not always the seat of the inflammation ; and in some cases the colic may have nothing to do with a hernia, which the patient chances to have, but is wholly owing to some of those causes, which produce it in persons who never were ruptured. Eructation of wind, which usually accompanies this illness, and likewise the action of coughing, aggravate the pain to a degree hardly tolerable.

It has happened in one or two instances, that the ileus has from the very beginning occasioned restlessness and uneasiness rather than pain, even in those, after whose death a portion of the intestine has been found sphacelated. The pain in those who recover, is changed into soreness, with a manifest relief of all the other symptoms ; and into restlessness in those who die, all the other symptoms at the same time becoming worse. The duration of the pain, before it makes a favourable, or fatal change, is very various, accordingly perhaps as there may be a small portion of one, or a large part of several of the intestines inflamed ; and according to the greater or less influence of those causes which retard or hasten the progress of inflammations towards a cure, or a gangrene : so that the distemper

has destroyed the patient on all days from the second to the fourteenth. It is obvious, that a violent injury by a blow, or fall, or by some corrosive poison, may excite such an inflammation of the bowels, as will be fatal on the first day, or in a few hours.

The state of the pulse is of great importance in ascertaining the nature of those symptoms, which the colic has in common with icteric and spasmody complaints, where the vomiting and pains are sometimes as great, but without any danger; for in the ileus it almost always has a feverish quickness, but in the others it beats in the natural manner: and yet for some cause, about which I can form no conjecture, it happens, though very rarely, in this and in other inflammatory and malignant cases, as has been elsewhere mentioned, that the pulse continues in a natural state, giving not the least notice of danger, or of approaching death. I have observed this thrice in the ileus.

A hiccup, and an unquenchable thirst, often come on early in the distemper, and tease the patient through its whole course.

There is such a disposition in the stomach to reject every thing, that it is often difficult, even in the beginning of this malady, to contrive any food or medicine which can be kept. Afterwards, besides what has been taken down, there is vomited up a brownish liquor, of which I have heard many patients and their nurses say, that it affected their senses like excrement; and therefore I suppose it to be so, though it never struck me as having a stercorous smell. The old medical writers likewise call it liquid excrement. This has made its appearance on the first or second day, but has not usually been observed sooner than the third or fourth; it has been delayed till the eighth. Above two quarts have been vomited up daily for six or seven days, during which the patient hardly took any thing. It is probably supplied in the same manner as the evacuations in a violent diarrhoea. From this symptom it has been concluded, that, at least in some cases, the ileus arises not from a stoppage or stricture in any part of the bowels, but from their inverted motion; which opinion is confirmed by what I have heard the patients and their attendants assert, that clysters had been vomited up; which has happened even where the mischief has arisen from an inguinal rupture, in which it has been supposed that the intestine was strangled in the ring so that nothing could pass. In the instant of dying, an inundation of this liquid has suddenly burst forth upwards and downwards. This sort of vomiting, together with a great inflation and tension of the belly, are symptoms of the utmost danger; yet some are said to have recovered after these appearances; but instances of this are, I believe, extremely rare.

When the pain goes off without the patient's being relieved in other respects, a restlessness and anxiety either come on, or are increased to a most distressing degree. Notwithstanding the inquietude, and want of sleep, and the great violence which must be done to the powers of life by this very formidable disease, yet it hardly ever happens that the patient is delirious.

The peculiar and distinguishing symptoms, which characterises the inflammatory colic in the very beginning, is a costiveness ; which it is always extremely difficult, and too often impossible to conquer. As soon as a discharge downwards can be procured in a copious manner, the patient perceives a quick abatement of all his misery, and is soon restored to health. But it is not from one or two small evacuations, that we can entertain much hope of the temper's beginning to give way. This has happened on the first or second day from the excrement which was lodged in or near the rectum, far below the seat of the mischief. And later in the temper, a very small portion of that liquid matter, with which the bowels are deluged, has seemed to have been forced downwards, while the disease was every hour growing worse. Such ineffectual evacuations have been observed more than once or twice in the course of this illness, without saving the patient's life : and two or three of them have come away not many hours before a coldness of the extremities came on, and was soon followed by death.

Upon dissection, there have been found in some bodies, strictures, subsisting after death so strongly, that when the gut was cut in two, the cavity seemed entirely obliterated. In others there have been various portions of the intestines discoloured and sphacelated, but without any stricture or obstruction throughout their whole length. In an inguinal rupture, the intestine surrounded by the ring, was so far from being strangled, that two fingers could pass between them ; and the gut in that part had been less inflamed than what had fallen into the scrotum, which was black and mortified. Death perhaps might have made some alteration in these appearances. A person has died with all the usual symptoms of the ileus, where the only part affected was half the circumference of the outward membrane of the colon, which for the length of five inches was black. A very small portion of the gut, and empty of all contents, so that it was imperceptible externally, had fallen into the groin, and was mortified, in one, who died on the fourteenth day of the disease.

This account of the ileus shows that all heating things must be avoided, which have been too often given ; and that its cure must depend upon the success of those means which abate inflammations, and procure stools. The first of these purposes is best answered by bleeding, as often as it is judged that the symptoms require, and the strength of the patient will bear. Warm bathing will greatly assist the good effects of the bleeding, and cannot be repeated too often : it very rarely fails of giving a temporary relief, by procuring a perfect respite from the pains, as long as the patient continues in the bath. Fomentations, and bladders half full of warm water applied to the belly, are weaker remedies of the same kind with the bath. The application of a blister to the same part has been attended with apparent benefit, and acts perhaps both by moderating the inflammation, as when put upon the side in pleurisies, and also by correcting those spasms which obstruct, or invert, the natural motion of the intestines.

All these helps are greatly serviceable in disposing the bowels to yield to the power of cathartic medicines; by the failure or success of which the life or death of the patient must at last be determined. It is a misfortune that the taste of purging drugs is generally disagreeable and nauseous; especially as a loathing of every thing, and a vomiting, are symptoms which distress these patients in the very beginning. Hence arises a very great difficulty of contriving any purgative, which can be taken and kept. However, they who can swallow pills, have very readily taken five grains of cathartic extract made into a pill, and repeated it every half hour until it had the proper effect. One or two spoonfuls of a strong solution of cathartic salt in weak broth, or in peppermint water, has often been retained, when nothing else would stay upon the stomach. The infusion of senna, given in the same manner, has sometimes been borne; and so has even the castor-oil. In a very few instances I have known this oil rubbed for a considerable time over the belly, where the patient has thought that this mode of using it contributed not a little to the bringing on a proper and plentiful evacuation, and sometimes with great pain and griping. Calomel, and other mercurial preparations, have been judged to quicken the virtue of purgative medicines, and to render their operation far more certain. This power of mercury has not been satisfactorily confirmed to me by experience; perhaps because I have not used it often enough, or not in cases which admitted any relief. Clysters seem to do very little good, except those prepared from tobacco; the smoke of which is commodiously thrown up this way by such an instrument, as is now commonly used by gardeners to fumigate trees in order to free them from insects.* It is not unlike the wooden one described in Heister's Surgery; but it should be made of brass, and, instead of a pipe at the top, to which in Heister's the mouth is to be applied, there should be a conical brass tube, the top of which should be so small as to enter an inch at least into any common chamber bellows. This is much more commodious than when the tube is made to screw on to the pipe of a pair of bellows made on purpose for it: for then the bellows must always be carried with it; whereas any common pair may be used with the conical tube. The tobacco is very conveniently lighted by a piece of touch-paper. The smoke of tobacco thus conveyed into the rectum acts very powerfully in controlling the irregular motion of the intestines, and in forcing them strongly to empty their contents in the natural manner. Such an enema has sometimes succeeded the first time of using it, and sometimes not until it had been repeated every four hours for a whole day: and in too many cases it has totally failed of doing any good. Possibly some sorts of tobacco may possess this virtue in a stronger degree than others, which by future experience may be ascertained. Where the proper instrument for giving the smoke cannot be had, there an infusion of tobacco may be used, made of twelve ounces of

* Among the remedies for the ileus, Hippocrates mentions inflating the intestines.
ΦΟΣΣΥ ΧΑΚΙΣΤΙΧΙ ΙΤΙΙΙΙΙΙΙ, ΚΕΙ ΦΟΣΣΥ ΕΙ ΤΗΝ ΡΩΣΙΑΝ.—*Ileus Novus*, xv. — E.

boiling water, poured upon half a quarter of an ounce of tobacco. This infusion strained has been borne without occasioning vomiting or sickness, but it has seemed to affect the head with giddiness more than the smoke.

A pound of quicksilver has been taken in order to force a passage by its weight, and has probably been preferred to an equal weight of water, or broth, as being less likely to be vomited up, either by lying in so small a compass, or by some specific anti-emetic virtue of the quicksilver. But in the few instances, in which I have known it given, it has by no means succeeded ; and it does not seem likely that it ever should : for the obstruction may be in an ascending part of the intestine : and though this weight could be applied in the most advantageous manner, yet the force which constringes the intestines, or inverts their motion, is in all probability far superior to the power of gravity alone, in any quantity of liquid, or solid, that could be taken down.

Against the use of opium in this malady it has been urged, that narcotics deaden the irritability of the bowels, and defeat the operation of cathartics, on the effect of which the cure of the patient depends. In favour of opiates it may be considered, that they check the vomiting, and enable the stomach to retain such a quantity of purging drugs, as may far overbalance the binding quality of the anodyne. Besides, it is well known that opium has a sovereign virtue of controlling spasms, and all irregular convulsive motions of muscular fibres. Lastly, the want of sleep, with which these patients are worn down, and the incessant restlessness with which they are fatigued, call aloud for the assistance of this medicine. Upon this view of the reasons on both sides, the probability of advantage from anodynes has determined me to recommend them, and experience has strongly confirmed this judgment. Under the protection of an opiate, I have successfully given more, and stronger purges, than would have stayed without its help ; the patient's strength has been kept up by some refreshing sleeps ; and even in hopeless cases, in which the dying person is harassed by unspeakable inquietude, he may be lulled into some composure, and without dying at all sooner, may be enabled to die more easily. Lord Verulam blames physicians for not making the euthanasia a part of their studies : and surely though the recovery of the patient be the grand aim of their profession, yet where that cannot be obtained, they should try to disarm death of some of its terrors, and if they cannot make him quit his prey, and the life must be lost, they may still prevail to have it taken away in the most merciful manner.

Where the inflammatory colic is joined with a rupture, it is right to reduce the rupture, if it can be easily done ; but it is doubtful whether much pains should be taken about it, for it is uncertain that the rupture is the seat, or the cause of the inflammation. An ileus is often seen without a rupture ; and a rupture without an ileus ; and consequently the symptoms may go off, though the rupture continue ; just as, without this, they often come on : and the symptoms have

continued, and ended in death, notwithstanding the reduction of the rupture. Be the case as it will, all violent means to reduce the hernia will be more likely to aggravate than to relieve the disease. We know that a hernia does not necessarily hinder the operation of purges; and if their effect be but copious, the patient may be secure of his recovery.

The operation of dilating the ring with a knife, and by that means freeing the gut from the stricture by which it is supposed to be strangled, is, as far as I have observed, very rarely, if ever, advisable, as well upon other accounts, as for all the reasons which have been just mentioned. No one, who has ever seen it performed, can help having a dread of directing such a hazardous operation too soon, or such a painful one too late: and we are, I think, greatly at a loss for any rules of judging in what case, and at what precise time of the illness, this operation may be successful, and nothing else.

CHAPTER LII.

Inflatio et Ructus.

FLATULENCE is not an original distemper, but attends upon most disorders of the stomach and bowels. It is very commonly one of the numerous evils belonging to hysterick and hypochondriac patients; and is sometimes the forerunner of an epileptic fit. Great complaints of windiness are in different persons accompanied with indigestion, sickness, vomiting, some difficulty in swallowing, excessive uneasiness, almost to choking and convulsions, languors, a sense of fainting, a loss of voice, giddiness, and palpitations of the heart.

This complaint is commonly rendered worse, but not always, by costiveness; and though sometimes it be relieved, yet it is oftener increased after eating. Bath is no certain cure for flatulence; nor indeed can it be expected, that the same means should always remove a disorder, which is a symptom of various diseases. If the original disease be known, the remedies must be applied there; but if flatulence be the only complaint, the best medicine will be some warm and gentle aperient. The following has been signally useful, taken every night in powder, or in pills: half a scruple of powder of chamomile flowers, three grains of long pepper, and one of aloes.

Fits of eructation have returned every day both periodically and at uncertain hours. They have been joined with giddiness, heart-burn, and hiccup, and have risen almost to a degree of convulsions. Wine and sweet things have proved hurtful. Acids have been beneficial. Vomits and purges have been useless.

CHAPTER LIII.

Insania.

GREAT anxiety of mind, whatever may have been its origin, is a

principal cause of insanity, that is, a disordered understanding, with a quiet pulse and without any acute illness. It has been the consequence of some diseases, particularly of worms, and epileptic fits, and of many affections of the head, as dropsies of the ventricles of the brain, and scirrhous tumours, and also of blows. Sleeplessness, and disagreeable sensations of the bowels sometimes also rising up to the head, often precede perhaps rather than cause lunacy. Women seem much more liable to this misfortune than men, and particularly at the time of their lying-in.

It is one of those distempers, which hardly ever appear before the age of puberty. I have never seen it earlier than in the sixteenth year. An hereditary cause of madness has lain dormant even till old age, and has made its first appearance after sixty.

It is an inveterate opinion, which my experience has uniformly contradicted, that madness is influenced by the moon.

The gout is supposed to absorb other distempers, and to turn them so perfectly into its own nature, that no traces shall appear of any other malady beside the gout. I will not answer for the truth of this observation; but I make no doubt of my having observed some power of this kind in madness; upon the access of which I remarked an extraordinary and immediate recovery of strength and health in one, who was languishing with extreme weakness consequent upon a fever. In another, who had every sign of a pulmonary consumption advancing fast to its last stage, madness came on, and presently made a cure of the consumption, of which I almost despaired by any other means.

Great violence is probably done to the brain, when a man is deprived of reason, the principal characteristic of his nature: but the parts of the brain subservient to animal life, seem so distinct from those which are essential to the exercise of reason, that insanity has in many instances been no hindrance to the enjoyment of good health in all other respects even to extreme old age.

Those who have been cured of lunacy, are very apt to have relapses; and some divide their whole lives between madness and reason. Such as never return to the use of their senses, are alternately under the dominion of spirits either too drooping, or too elevated; in each of which states it is not uncommon to have them pass several months together: they appear most reasonable in the melancholy fit. An old madness in some becomes stupidity, and idiocy. Mad persons seem to have a very imperfect manner of measuring time. Some, upon my asking them, have told me that they believed they had passed two months in a state of confinement, in which they had in reality been above twenty years.

In the beginning of madness, which the patients are too apt to increase by drinking strong liquors to excess, and by many unnecessary hurries into which they put themselves, quiet and confinement (not under the care of their own servants, but rather of strangers, of whom they may stand in some awe) will often restore them to their senses without the help of medicines. But where they are at all disposed to be costive, or have heated themselves by their imprudent

manner of living, they have been greatly assisted in their recovery by the use of some purging physic. Opium has also been sometimes useful in composing their minds by procuring them sleep. Beside these, and what may be further necessary to put their general health in good order, and to keep it so, I have observed nothing which has been of any service in removing this great affliction.

CHAPTER LIV.

Intestinorum Dolores.

PAINS of the bowels arise from a great variety of causes which we know, and probably from several others which we do not suspect, and care must be taken to refer them, as far as we are able, to their true origin ; for according to this, very different treatments may be required.

Diseases of the ovaries, womb, bladder, kidneys, spleen, pancreas, liver, and omentum, are often confounded under the general name of pains in the bowels. A stone in the gall-bladder I have great reason to believe is a much more common cause of such complaints than has been generally supposed ; for many of them, after returning frequently for above twenty years, have shown their true nature at last by being joined with signs of the jaundice. Scirrhouus tumours and ulcers in every part of the abdomen, worms, especially in children, and ruptures in adults, the colica Pictorum, ileus, and strictures in various parts of the intestines, with other mal-conformations, must be kept in mind, as the possible maladies of these patients. The affections of the womb, or of any parts belonging to it, may be probably conjectured from the fixed seat of the pain, and from its relation to the menstrual discharge, to child-bearing, or miscarriages. Those of the kidneys and bladder will show themselves not only by their situation, but also by the preternatural appearances of the urine, or by the frequency and pain of making water : and a further sign of the affections of the womb, kidneys, or bladder, is afforded by the small concern which they have with the stools. The ileus or inflammation of the intestines, is too acute, and too strongly marked, to be easily mistaken. Ruptures cannot but be found out, unless the patient use art to conceal them. Where worms do not show themselves in the stools, a disposition to them may still be discovered by the state of the feces, which requires the same treatment. The colica Pictorum, if the person be not known to have been hurt by lead, is many times not clearly ascertained, until the limbs begin to be paralytic. Ulcers and scirrhouus glands in the intestines will greatly derange their functions, and the discharge from the ulcers may appear in the stools ; and either here, or in any other of the abdominal viscera, they are almost always accompanied with loss of appetite, of flesh, and of strength, with a quick pulse, and swelled legs. But if we were ever so sure of the presence of these sores, and tumours, or of adhesions, and strictures of the intestines, or other

mal-conformations, they would only direct us to do nothing further, than mitigating the urgent symptoms.

Beside all these, and the periodical pains before mentioned, the stomach and intestines are liable to uneasiness and pain, arising from a constitutional weakness and languidness in performing their functions of digestion, assimilation, and expulsion; or from an accidental one owing to the improper quantity, or quality of the food, to the injudicious healing of cutaneous ailments, or to disorders of the head, or limbs, which by some hitherto undiscovered power are transferable, as experience teaches us, into the bowels, and from them back again to their former seat. Such a failing of the natural vigour of these parts will be productive of sickness, vomiting, diarrhoea, tenesmus, flatulence, a sense of fulness, a tension of the belly, borborygmi, pains like the cramp, a difficulty in making water, and such a strong acid, as will almost excoriate the parts through which it passes in going upwards or downwards.

A sudden attack of pains in the bowels should in no case be treated, as it too commonly is, with spirituous liquors: when they proceed from the improper quantity, or quality of food, or fruit, a vomit, or a purge, according to what nature points out, should be immediately taken; after either of these has had its proper effect, if the pains or purging require it, they may be checked with an opiate: the consequent weakness of the bowels may sometimes require bitters and aromatics to be taken morning and evening for a few days. Gouty pains suddenly transferred to the bowels are best relieved by such a warm opiate as the *confectio opiatæ*, the dose and repetition of which can only be determined by the exigency of the case. The less dangerous and less acute uneasiness, consequent upon healing old sores, and upon repelling slight pains of the limbs or cutaneous ailments, will be sufficiently provided for by a course of aromatics and bitters, taking care at the same time that the body be not costive, which is a caution necessary in every disorder of the bowels.

A constitutional weakness will often be strengthened, and a return of the attendant pains prevented by drinking Bath water, and by the use of a flannel waistcoat over the shirt; for cold is detrimental. Such patients may take with great advantage a bitter and aromatic powder once or twice a day for many months, to each of which powders, if the persons are teased with purging, may be added two or three drops of tincture of opium; but if they are hurt by the other extreme, they may take three or four grains of rhubarb every day mixed with one of the powders, or ten grains twice a week. In slighter cases, an accidental increase of pain, if it be not considerable enough for the use of opium, may be relieved by a few spoonfuls of simple peppermint-water, or by applying warm cloths, or a bladder of warm water to the abdomen. The affections of the stomach are so much of the same nature with those of the intestines, and often so undistinguishable from them, that most of what is said under each of these articles is equally applicable to both of them.

CHAPTER LV.

Ischuria.

A DIFFICULTY of making water seems born with some persons, who have been troubled with it from their childhood without any ground to suspect either a venereal or a calculous cause.

The weight of the pregnant uterus has often obstructed the passage of the urine, for which a change of posture will sometimes be a remedy, and some women are so distressed with it, that while they are in the last months they can never part with any water without the help of the catheter. A similar effect may arise from the stone in the bladder. Venereal disorders will disease the urethra ; and sometimes, as I suspect, this mischief has been done by the injections, which have been used for their cure : these may be relieved, but I have seldom known them to be cured, by a long-continued use of a bougie. I have been witness to a fatal suppression of urine from this cause.

A woman, after a difficult labour, had a retention of urine for nearly three days ; the catheter was then introduced, and brought off above five pints of urine.

In a young woman, the taking of an emetic was three times followed by a suppression of urine.

All these obstructions of the urinary passages happen without any fault in the kidneys ; but the most dangerous ischuria is that, in which the kidneys secrete no urine from the blood. In one patient, stones in the kidneys were probably the cause of an incurable retention of the urine ; but I have had no reason to think this of any other, whom I have attended ; and it is not likely to happen often, that the kidneys should be destroyed by calculous matter, and both of them be made wholly useless, or that both the ureters should happen to be plugged up at the same time, so as to let no water pass. Whatever probability there may be, that the bladder is empty, and that the disease is in the kidneys, it will still be advisable in every suppression to make the matter certain by the introduction of a catheter.

Extreme restlessness, and sometimes a lethargic stupor, accompanies an ischuria, together with vomiting, hiccup, fever, and pains in the loins. One of these patients complained of a strangury ; but I have not remarked that others have shown any desire of making water. One man also complained of an urinous taste in his mouth, in whom I had reason to suspect, that urine was secreted in the kidneys, but could not pass off.

A total suppression has lasted seven days, and yet the patient has recovered. It has been fatal so early as on the fourth day. But in general those patients, who could not be cured, have sunk under their malady on the sixth or seventh day.

A draught with spirit of turpentine from ten drops to thirty has been given every five hours ; a clyster with half an ounce of spirit of turpentine has been injected twice a day ; half a grain of cantharides

has been taken every four hours ; and clysters have been employed with half an ounce of diuretic salt ; and warm bathing as often, and as long as the patients could bear it ; and with all these the distemper has ended happily. But on the other hand all these remedies have in some cases been tried without success.

CHAPTER LVI.

Linguae et Oris Dolor.

CANCERS of the tongue and mouth begin with a small hard lump, and sometimes with a little sore ; both of which are attended with pricking pains, and they spread in the same manner with cancerous sores in other parts. This is so great an evil, that the slightest suspicion of it occasions very great uneasiness. It may prevent some groundless alarms to be assured, that I have known a burning pain of the mouth and tongue continue in several persons for many months without any ill consequences. A bitter, acid, putrid, and brassy taste, which infects everything put into the mouth, are usually the effects of disordered stomachs, or of taking mercurial medicines. A man, who had not taken mercury, found everything which he put into his mouth infected with a brassy taste to such a degree of nauseousness, that he lost his appetite, and in two months his flesh and strength were greatly wasted : he took test. ostr. 3ss., rad. gent. gr. iv., hier. picr. gr. ss., morning and evening, and soon began to recover his true taste and appetite.

CHAPTER LVII.

Lypothymia, or Fainting.

A FAINTING fit is a momentary cessation of life, and is an attendant upon worms in children, and upon those who are paralytic ; a slight epileptic fit appears in this form ; and it is a common beginning of a fit of the hooping-cough in adults ; it is a symptom familiar to hypochondriac and hysterick persons, and to breeding women, and fevers sometimes begin with it. In general it is more common in women, than in men.

It will seize some persons without any warning, and in others it gives notice of its approach by pain, or a palpitation, or a sense of fulness in the stomach, rising up thence to the head, by a mist, and flashes of light, spasms, and pains of the bowels, giddiness, cold sweats, tremblings, and great quantities of wind breaking up from the stomach.

The posture of kneeling, or standing, too long continued, especially with the back to a large fire, and after exercise, the sight, or smell of disagreeable objects, will make many persons swoon, who are otherwise in good health ; and the same will happen to some without any apparent cause. When a person is apt to faint upon

waking in a morning, there is some suspicion of its being a slight degree of an epilepsy.

One fit immediately succeeds another in some persons for six or seven times. Some recover out of a swoon with vomiting, or purging, or with great eructations, and complain of giddiness, others feel themselves perfectly well upon the return of their senses.

All kind of evacuations have been found hurtful to those who are subject to fainting. Where this disorder is habitual, and not complicated with any other, I have remarked cold bathing to be beneficial; but if it be a symptom of another distemper, it will cease of course when that is cured by its proper remedies. It seldom happens that the swooning fit continues so long as to require much help to recover a person to life. Volatile salts applied to the nose are generally sufficient. Bleeding is utterly improper. Rubbing the body with hot cloths, also clysters, might be employed, if the fit were to continue any time, and all the other means, which are found expedient in recovering drowned persons.

CHAPTER LVIII.

Lumborum Dolor.

THE loins are the seat of various pains derived from many different causes, such as the gout, rheumatism, a sudden cramp of the muscles lasting two or three days, and making all motion intolerable, gleet, fluor albus, stones and ulcers of the kidneys, ulcers of the womb, pregnancy, and the approach of an abortion. I saw one person, who had complained of a pain in this part for fifty years, but this was only slight, as may readily be imagined. However I attended another, in whom a pain of the loins had been violent above seven years, and motion increased it to such a degree, that during all this time the patient was incapable at best of bearing a carriage, except for a very short time, and frequently could not be moved from one chamber to another without great difficulty; and yet there was no external appearance of harm, nor any such derangement of the animal functions, as to point out the cause; neither was the nature of the complaint to be ascertained from the effect of any medicines, which were tried for its relief. This woman at last recovered. The remedies for this pain must be the same, which are proper for the distemper of which it is a symptom; or such as have been mentioned in chapter xxix., under the article of pain in general.

CHAPTER LIX.

Lumbrici.

BESIDE the round worms, the ascarides,* and the two kinds of flat worms, there are probably many other small animals taken in with our food, capable of living, and breeding in the human intestines.

* Concerning the *Ascarides*, see chapter x.

The symptoms, which have been found joined with worms, and which, upon their being brought away, have ceased, are pains in the head, giddiness, sleepiness, restless sleep, and waking out of it in a fright and with outcries ; convulsions, feverishness, thirst, paleness, a bad taste in the mouth, offensive breath, cough, shortness of breath, itching of the nose, pains of the stomach, sickness, loss of appetite, voraciousness, wasting of the flesh, tenesmus, itching of the fundament towards night, and lastly, skins and slime in the stools.

The tape, or flat worms, are the most injurious to health : the round worms and ascarides would sometimes hardly be suspected, if they were not discovered by the itching of the fundament, or did not appear among the feces. I have seen a tape worm of the length of four ells, which came away at once. Separate joints of it are often voided alive. The round worms will come up alive into the mouth, and I have known them live two or three days after they were come out. In two instances, which have occurred to me, there was ground to suspect that the jointed tape worm had occasioned epileptic fits, madness, and idiocy.

We have the misfortune to have innumerable remedies for the worms ; this being pretty generally a sure sign, that we have not one, upon which we can with certainty depend. Spirit of turpentine, oil, infusions of tobacco, and mercurials, which are such deadly poisons to many small animals, out of the body, have been thrown up in clysters without destroying the ascarides ; they, and probably the other worms, being so defended by the mucus, in which they lie, that they are secure from the action of any noxious powders, or liquors. Until therefore the reputation of a specific for worms be better established in some of the many medicines which lay claim to it, nothing better can be done, than giving purging medicines of any kind which are best borne, and can be repeated without creating too great a degree of loathing. Bitters either joined with these, or in the intermediate times, may be useful, not that I have any reason to believe them hurtful to worms, but because they will help to restore the disordered stomach and bowels to their natural strength. A pint of water with as much common salt as could be dissolved in it, has more than once been of singular use in expelling worms from the intestines.*

CHAPTER LX.

Lymphaticæ Glandulæ.

BLISTERING plasters are apt to make the neighbouring lymphatic glands swell, but this swelling has generally soon disappeared. After a blister the whole arm of one person continued to be swelled for a long time ; probably from some obstruction of the lymphatic vessels. A blister applied to the head has in several persons so obstructed the course of the lymph, that the whole forehead has been enormously swelled for a day or two. This swelling has gradually descended to the cheeks, and chin, and neck, and then disappeared.

* See *Med. Trans.*, vol. i., p. 54.

In an old woman, who seemed otherwise healthy, and in particular had no disease of the breast, the lymphatic glands under the arms began to swell, and be obstructed, in consequence of which the whole arm and hand swelled to an enormous size without pitting, and after a little while she died. Likewise in a young man the face, and head, and breast were greatly swollen without pitting, the veins of the breast were varicous ; he had pains in his jaws, was sleepless, short breathed, could hardly bear to lie down, and after a few months died.

CHAPTER LXI.

Mammæ.

It has been known that milk has continued to fill one or both the breasts of a woman for four months, for five, for six, for seven, and even for twelve months after she had weaned her child. In a nurse, who was seized with the small-pox, the milk went away just at the height of the distemper, and returned copiously as soon as that was over.

A woman in her fortieth year began to feel her breasts swell : they were soon after filled with milk, which ran out for three months : as soon as this stopped, she became pregnant : she had no child before for six years.

It often happens to lying-in women, and it may happen to any other, that the breast inflames, and comes to suppuration : the adipose membrane seems to be the seat of this inflammation, the glandular part being very little concerned in it ; and it is of no more consequence in this part, than such a sore would be in any other part of the body.

A swelling of the breasts with little or no pain, except a sense of tension, attends pregnancy, and sometimes the regular menstrual discharge, as well as its obstructions, and various other irregularities. The breasts of women are subject also to pain, either with or without a swelling, which often lasts for a long time, and yet is of as little consequence as their swelling, while they continue free from any hard lump. A slight blow on one of the breasts has occasioned a pain, which lasted at least ten years without the appearance of its ever coming to any further mischief. In a great variety of instances, pain has come on without any external cause, and has lasted in some above twelve years, and then has gone off spontaneously : great care should be taken, that this pain be not increased by the pressure and tightness of the stays : a gentle opening medicine may now and then be advisable in such a case. It seldom happens that pain does not occasion a general fulness of the breast, but if there be no hardness, which denotes a beginning scirrus, the swelling and pain have often been considerable without any mischief ensuing.

A serous or bloody oozing from the nipple, has been the forerunner of a cancer ; and it has likewise often appeared, and the nipple

has been for many years drawn in, without making any further progress to that dreadful evil. A scirrhus, or hard lump, though ever so small, formed in the breast, may justly cause some apprehension of ill consequences ; for I have never known a cancer come without being preceded by this : nevertheless I have in many instances remarked that this has been formed without being followed by a cancer ; especially if there have been no previous pain, swelling or discharge from the nipple. For a lump has frequently been felt by accident in the breast, and might perhaps have been there a considerable time before it was discovered, the breast being in every other respect in its natural state. While a small scirrhus in the breast continues quiet, it is best to forbear all external applications, and additional coverings to keep the breast warmer than usual ; nor can I recommend any internal medicines ; an exact diet seems to answer all reasonable purposes. Nature will sometimes disperse a scirrhouus gland in the breast, as I have several times observed, and particularly in one woman, where the tumour seemed to tend to so much malignity, that it was thought advisable to cut it out : some accidental circumstances delayed the operation for some time ; and in the meanwhile the swelling of the breast became less, and softer, and continued to do so till it totally vanished. These however must be acknowledged to be rare cases ; but it is by no means unusual for a scirrhouus swelling of the breasts neither to grow, nor to be painful for many years, especially if it were formed, as happens in a few women, before the age of thirty. The most usual, and the most dangerous time for the coming of a tumor in the breast, is near, or after, the fortieth year of life ; yet in a woman of seventy it has occasioned neither pain, nor inconvenience for seven years, and seemed to have no connexion at last with the distemper of which she died. I have noted one man, in whose breast a scirrhouus lump had arisen exactly the same with what is so common in the other sex. In another the breast became cancerous, and was successfully cut off.

As soon as a hard tumour in this part begins to be uneasy, and to spread with pricking pains (in which state it has continued for several years before it has broken), many both external and internal medicines have been recommended to check its progress, and to disperse it. I have not seen much reason to confide in any of the means, which are supposed to have the virtue of resolving such a tumour, after having first soothed it to a state of indolence ; though in two or three instances as I have noted, the extract of hemlock has had the reputation, and perhaps justly, of effecting this. But then it has undeniably failed in so many others, that it is in my judgment not worth any body's while to waste, in making a trial of it, any of that time, which is so precious after the tumour has once begun to make advances towards ulceration. The insignificant pain of cutting it out, while it is small, and the prospect of its healing readily on account of the smallness of the wound, and of the health not being yet much hurt, should determine every one to the operation at this time. If the breast be curable, this, I am persuaded, will be the best cure ; and

supposing that the mischief is not local, but that the whole body is infected either with an hereditary, or an acquired cancerous taint, I am not aware that the distemper would either more certainly, more rapidly, or more painfully put an end to life, for having made this most promising effort to elude its power.

If the want of resolution in the patient to have the scirrhus taken out, or the delay occasioned by the trial of various specifics, which had promised much, and performed nothing, have suffered the hardness gradually to occupy the whole breast, and to ulcerate, with a great increase of pain in the part, and flying pains over the whole body, and hectic fever, and loss of appetite, of flesh, and of strength (at which state it may arrive in a few years, or in a few months) what is then to be done? Now even in this state, if the schirri have not spread too far under the arm-pit to be all cut out, the time of the operation is indeed almost over, but not entirely; for in these almost hopeless circumstances I have known it performed with success. It can be no wonder, when done so late, that the operation often fails, and that the wound should either never heal, or that fresh schirri should arise after it has been healed; still, there will be some advantages in giving a little respite to the patient, and her attendants, from the offensiveness of a foul ulcer, by removing at once the putrid mass.

Where the cancer is spread deeply under the arm, and the whole arm is swelled from the obstruction of the lymphatic glands, with loss of appetite, and strength, and shortness of breath, and every sign of inevitable death, all which then remains to be done, is to keep the ulcer with proper dressings (by washing it with water impregnated with fixed air, or by the application of a carrot poultice, in which this air abounds), as clean, and as quiet, as may be; and to soothe the pains, and procure rest with as much opium as is necessary for these purposes. The degree of pain attending a cancer is extremely various; in some it appears to be great, and in others but slight and inconsiderable.

CHAPTER LXII.

Menstrua.

THE regular and natural state of the menstrual flux in women is well known to be intimately connected with their health. They seldom suffer much from any distemper without experiencing some deviations in this particular from the orderly course of nature; and the irregularities of this evacuation, if they continue long, except in pregnancy, will most commonly have bad effects upon the general health; but these irregularities are perhaps oftener a sign, than the cause of other distempers.

The proper time of the first appearance of the menstrua, is from the age of twelve years to fifteen. Some show of them has been known in girls of eight or nine years, and even of five years; but I

never knew an instance of their continuing to return regularly, when they began sooner than the tenth year of life. These very early appearances have not been attended with any ill consequences, and required only a little rest and patience.

When the catamenia begin first to flow at the proper time, it happens to many young women, that for the first year or two they will not go on to observe their exact periods, without either exceeding, or falling short of the just quantity : in this case, and likewise where they delay to come on for one or two years beyond the usual time, it is better not to be too hasty in prescribing medicines ; for as the strength of the body increases, nature will most usually set all such little anomalies to right, where there is no other distemper, and in the meantime the constitution will suffer no harm.

The case is very different after women are come to their full growth, and strength ; for every function of life will suffer, and often in a violent manner, from great disorders of this evacuation ; yet nature has allowed some latitude, so that no inconvenience will arise from the catamenia coming a week sooner or later, staying a day less or more : all which we find by experience to be very consistent with good health.

There are constitutions, in which not only miscarriages, difficult births, and frequent lyings-in ; but even terror, uneasiness of mind, and moderate exercise, occasion such a loss of uterine blood, as hath brought on great pains in the head, back, and bowels, and a dangerous weakness. Sometimes without any apparent cause the menses have exceeded the healthy limits, by returning too often, or by continuing to flow too long, or in too great abundance. These hemorrhages have been so lasting as to have continued for many months together ; or so profuse, as by their abundance to have threatened immediate death. But these cases, where pregnancy was not concerned, have been usually more alarming than dangerous ; for among the many instances of excessive floodings which I have known, I have remarked only two, who, without being pregnant, have bled till they were exhausted, and died.

The menstrual discharge gradually lessens between the fortieth and fiftieth year ; and sometimes misses for two or three periods, and after giving warning in this manner for a year or two, it then totally ceases. This seems to be the most natural way of its going off. But it very commonly happens, that at this time the uterine flux, instead of lessening, returns more frequently, and with more violence ; so that, except in cases of pregnancy, the greatest uterine hemorrhages have been observed at the time when nature is about ceasing to supply them any longer.

Young unmarried women sometimes have their monthly evacuation too often, and in too great quantity, but they are more subject to having it flow too sparingly, or to its not observing the regular periods, or to its being totally obstructed.

The obstruction of the catamenia has been imputed by the persons themselves to wetting their feet at the time of this flux, to terror, and

to frequent venesections. The injury done by difficult births more frequently occasions floodings, but has sometimes been followed by obstructions, especially if the milk continued to come into the breasts, which it has been known to do for several months after the child had been weaned, or though it had never sucked. Some distemper of the parts concerned, or a mal-conformation probably occasions irregularities or obstructions in some, especially in those, for such there are, who never experienced this evacuation. But perhaps obstructions are most frequently owing to other antecedent disorders of the health, which by weakening the powers of life, and hindering the due nourishment of the body, reduces it to such an exhausted state, as to afford no supply for this evacuation. If a woman ever so regular in this particular happen to have a long fever, the menstrual discharge is almost always obstructed. So likewise consumptive women in the last stage of their distemper, cease to have their courses return, merely from their weak and exhausted condition.

The effects which I have noted of suppressed menstruation, where it was not wholly dependent upon other disorders, are a weight and pain of the head, giddiness, a pale, and often bloated appearance of the face, flatulence, sickness, loss of appetite, indigestion, pains and a sense of fulness in the stomach and bowels, a swelling of the belly, which may be mistaken for pregnancy, pains of the breast, sides, back, and knees, swelling of the legs, loss of flesh, sleepiness, flushings, lassitude, fainting, melancholy, and the whole train of hysterical symptoms. The fluor albus has been a substitute for the menses, returning regularly for several months. The catamenia have in more uncommon cases been represented by a periodical bleeding of the nose, or by a vomiting of blood. Barrenness is an usual attendant upon any considerable deficiency of the menses; yet I have known a woman have children, who was not above twice in the year in the way in which she should have been every month.

The menstrua are often regular both as to time and quantity, but attended always with so much pain about the womb, as to occasion greater present misery, than any other irregularity, though with less hurtful consequences. This pain is most usually felt on the first day, and sometimes only for the first six hours, and is then so violent, as to make the persons keep their beds. In two or three instances I have known it not come on till the second day. A strangury has begun to be troublesome only on the last day. Pains of the head, limbs, back, and stomach, and particularly of the breasts, which are usually fuller at this time, together with sickness, and tenesmus, with all kind of hysterical evils, harass some women during the whole time of their menstruation.

The catamenia in the ordinary course of nature cease between the fortieth and fiftieth year. A very few have lost them before the fortieth (and one even before the thirtieth year of life) and yet enjoyed a good state of health afterwards, and have lived long. I have remarked some, who have continued to have them till they were sixty years old. They have become irregular in their time, and quantity,

not only a few months, which is their common method, but even for a few years, before they have entirely disappeared ; and after ceasing three or four years have been known to return. The animal powers, while the menses are preparing to cease, seem to be greatly oppressed, and less able to keep any constitutional disorder under, or to exert themselves in shaking off any accidental illnesses, which therefore at this time are unusually troublesome, and less disposed to yield to their proper remedies ; so that any lurking gout, or madness, or cutaneous diseases, have often taken the advantage of this weak state of the health, and have established a lasting tyranny.

It is probable that the menstrua leave most women in a kindly manner, without exciting, or creating any disorders, which require the assistance of medicine. But some, upon the occasion of this great change in the animal economy, experience a variety of disorders. The most common is that of excessive floodings, attended sometimes with faintings, and convulsions, which though hardly ever immediately fatal, yet are always very alarming, and have been succeeded by dropsical swellings of the legs, of the abdomen, and of the whole body, and by a broken state of health, from which some are with great difficulty, and others never recovered. In the intervals of these discharges, the fluor albus often conspires to drain away the strength. Sleepiness, numbnesses, and palsies have followed, and probably have been occasioned by these weakening complaints. Cramps, and wandering pains, have been the next most general attendants upon this revolution in the health of women ; which may perhaps be the effect of a great loss of blood, where the catamenia have gone off in this manner ; for I have observed the same after other immoderate bleedings. Giddiness, and shortness of breath, belong also to this train of evils : but no part seems to suffer more than the stomach and bowels, which are apt to be afflicted at the time of this change with pains, sickness, loss of appetite, heartburn, flatulence, an uneasy sense of fulness, the tenesmus, and piles. Every hysterick symptom has joined itself with these disorders. The legs at this time of life are more peculiarly liable to inflammations, and obstinate ulcers. It is less to be wondered at that some constitutions sink under the greatness, or multiplicity of such evils, than that others, after struggling three or four years under several of the worst of them, have happily been restored, and their health perfectly established. Perhaps when the menstrua are fully over, after escaping, or surmounting these difficulties, the health of a female becomes firmer than ever, and she bids more fairly for long life, than a man of the same age.

After the menses have disappeared at the natural time, and have seemed for many years to be totally gone, they have in some women returned beyond all expectation. This has happened at the sixtieth, at the seventieth, and even at the eightieth year of life ; and consequently after they had ceased for twenty or thirty years. In some of these they have observed their ordinary periods, as they had done in the earlier part of life ; but these unseasonable discharges have

oftener been irregular in their returns, too abundant in quantity, or joined with the fluor albus. The catamenia have in this manner returned and continued for seven years from no apparent cause, and without any evident injury to the health. This effect however most usually proceeds from some unnatural state of the womb ; and if these discharges be accompanied with great pains about the os pubis, the hips, and the loins ; and if in their intervals an offensive discoloured liquor drain away, they may justly be charged to an ulcer of the womb, which usually becomes cancerous, and incurable.

A profuse uterine hemorrhage may be occasioned by something in the womb, which must be brought away before the bleeding can be restrained. In other cases the patient should be kept quiet and cool : the body must be rather inclining to purging than costiveness ; and liquors should be frequently sipped acidulated with lemon-juice, or acid of vitriol. A dram or two of syrup of poppies will often be of great use in soothing a restlessness or anxious state of mind, which increase the malady. A very able and experienced physician* has proposed to me in consultation, the giving of one scruple of flowers of sulphur morning and night to such patients, where he judged it to be as useful, as in an immoderate flow of the piles. The Peruvian bark is seldom omitted among the remedies prescribed in this case ; and other styptic substances, as alum, galls, and oak bark, are often joined with it, as well as given without it. If I were satisfied that experience of the good effects of such medicines had established their reputation, no reasoning, however specious, would make me hesitate to confide in them ; but if they be used because of the sense of astringency which they impart to the tongue, it may be questioned whether this quality can afford us a reasonable expectation of their stopping the bleeding, in a part which they cannot reach till after they have been diluted by a great quantity of various liquids : and what degree of effectual stypticity can they then be supposed to possess, when they are not readily able to restrain the bleeding of a small wound made by a leech, though the powder of these substances be immediately applied to the orifice ? I am cautious of opening a vein, for reasons given in the second volume of the Medical Transactions, Query the fourth.† One scruple of alum has been given every day with safety : but I remember to have seen one woman near fifty years old in a bad state of health, whose belly and pudenda were swelled in a remarkable manner, so as almost to close up the vagina, all which was attributed (perhaps without reason) to checking an uterine hemorrhage by taking daily ten grains of alum. Four grains of saccharum Saturni stopped a profuse bleeding, as I was informed, in four hours ; but the violent and lasting colic which I saw occasioned by this preparation of lead, ought to make every one dread its use. Thirty drops of tinctura Saturnina had been taken every day by a woman for a like purpose, whom I afterwards saw labouring under a similar, though less violent, disorder of the bowels. Steel waters have

* Sir Edward Wilmot.

† See Appendix.

in several instances increased the hemorrhage. Camomile flowers have done the same : and so likewise has lying down; contrarily to what I should have supposed.

The opposite disorder to flooding, namely, where the catamenia are too sparing, or totally obstructed, may be occasioned, as was before observed, by a variety of other complaints, the remedies of which will be the likeliest means of rectifying all the ailments dependent upon them. But where there appears no ill health, except what is the effect, rather than the cause of the partial or total obstruction, there stimulating, bitter, aloetic, and chalybeate medicines are what physicians from general experience seem to have rested in ; various forms of which are to be found in all pharmacopœias. The black hellebore root claims some specific virtue as an emmenagogue, of which in my practice I have never met with any decisive proof. Camomile flowers undoubtedly possess it with relation to particular women ; for I have known more than one, in whom they constantly brought on some degree of an uterine hemorrhage, at whatever time of the month they were taken. Warm bathing, putting the feet in warm water, and sitting over its vapour for half an hour every day, have been used successfully. Electrifying, when employed for other purposes, has frequently brought on the menses before their time. But there are too many cases in which all these means have been found ineffectual.

The pains, which several women experience during some part of the menstrual flux, are safely mitigated with opium ; and such persons should always have in readiness half a grain or a grain of opium, to be taken as soon as the pain comes on, and to be repeated once or twice if the pain require, at the distance of half an hour. This has been very frequently given without checking, or in any manner deranging this evacuation. To those, whose stomach will not bear opium, it has been given as safely in a clyster. The tincture of opium has not appeared to be without some effect, when only rubbed in by a warm hand over the abdomen. Warm bathing, sitting over the steam of warm water a few mornings before the expected return of the catamenia, Bath waters, both externally and internally, have all been employed against this complaint, and with advantage.

At the time of life, when it is according to the course of nature that the menstrual flux should entirely cease, if it go off gradually and without any troublesome symptoms, which it most frequently does, no medicines will be wanted, nature herself being fully sufficient to bring about this revolution without any tumult or commotion. However, some attention may be useful in keeping the body from any tendency to costiveness, by taking occasionally a little lenitive electuary, or some purging water. If the menses leave a woman very abruptly, and either from this cause, or from any other, there should come on at this time vertigos, sleepiness, numbnesses, or pains of the head, with a sense of fulness, the taking away of six ounces of blood by cupping once a month, as long as these complaints remained, has been experienced with success. Whatever other disorders may

chance to show themselves, they must be treated with their usual remedies. In constitutions, which have been subject to cutaneous diseases, or which may be judged to be in danger from palseies, or some hereditary cancerous taint, an issue may be advisable ; which in other cases, as far as I have observed, may very safely be omitted.

A return of the menstrual flux to old women, after having left them for some years, may either be excessive, or it may be a symptom of an ulcered, or cancerous womb ; and then the proper remedies for these ailments must be employed : but if it continued to make its visits in a regular manner, as it has happened to some women, and the health appear in no respect to suffer, such persons will stand in need of no assistance from physicians.

CHAPTER LXIII.

Morbilli.

I PURPOSE first to give a history of the measles in a single patient, who had a regular and middling sort, and in whom, on account of the fairness of the skin, it was easy to observe with precisionness the appearance and disappearance of the eruption : after which I will relate the varieties, which I have noted in a considerable number of other patients.

On the first day

The symptoms were very slight shiverings, a failure of appetite, some degree of sickness, a quickness of pulse, a dry cough, no sneezing, no tears, nor redness of the eyelids, a very little thirst, and pains in the limbs.

2d. The night was quiet without any great complaint, the appetite still fails, and the cough and pulse are as before.

3d. This day all is much the same as yesterday.

4th. A faint eruption is to be seen by attentive looking upon the face : red spots are much more visible about the throat. The fever, restlessness, and want of appetite, are increased. The cough is rather less. The eyes are less impatient of light. There is no vomiting. The face burns, and is unusually flushed.

5th. Faintly red spots are sprinkled over the chin, and (at a greater distance from one another) over the rest of the face. The spots are of an irregular figure, and are much redder about the throat and breast. The fever and cough remain. There is yet no appearance of the eruption on the hands and arms.

6th. The spots of the face rise a little above the skin, so as to afford a perceptible roughness to the touch, and are visibly formed of many minute heads much less than a millet seed. On this day the eruption begins to appear on the arms. The fever, and restlessness, and impatience, are considerably increased. The cough is very troublesome, but without any difficulty of breathing. The eyes are weak, the eyelids are swelled. There is a total loathing of all food. To-

wards evening the symptoms grow worse, and with some oppression of the breath. The spots in the face are of a lively red. Yesterday the menses came on before their regular time, and lasted only twenty-four hours.

7th. Bleeding yesterday gave some relief. The night was a little quieter; but the fever and anxiety are very little abated. The eruption in the face is paler. The skin begins to itch in a troublesome manner.

8th. The symptoms are much abated, and the appetite begins to return. The eruption is more faint. The languor and fever are now and then much complained of.

9th. The night was tolerably quiet, and the patient is now a little revived; but still there are intervals of fever, and uneasiness, and lowness, which are much relieved by a repetition of bleeding.

10th. The night was very good. The eruption has totally disappeared, and hardly any fever remains.

11th. Some cough still remains.

12th. The sleep and appetite are returned, but the cough still remains; and so it continued to do for three or four days more: bleeding much weakened it, and in a few days more it went entirely away.

I shall now proceed to relate some diversities in the symptoms, which have attended the several stages of the measles, collected from a considerable number of patients.

Some have had weak and watery eyes one or two days before the eruption, and sometimes the same sharp humour has irritated the nostrils, and occasioned sneezing. The cough most usually has come on two or three days before the eruption; but it has been known to precede the measles seven or eight days, and it generally did so in the year 1753, when they were remarkably epidemical. Pains of the throat and head and back, have not been unusual in this preparatory stage. One person in particular had a most excruciating pain in the back, which continued a day or two after the eruption. Sickness and vomiting as well as want of appetite, have come on at the beginning, and lasted till the middle, or decline of the distemper. Some have been so fortunate as to have the measles appear after suffering so very little from fever or any of the preparatory symptoms, that they could hardly say they had been ill. The longer the preparatory symptoms continued, and the worse they were, so much the less mild has the distemper proved.

The first day of the eruption.

In one or two patients I have seen the eruption appear upon the arms on the first day, a few hours after its having been observed on the face and neck. But it so seldom happens that the arms and hands show any mark of the distemper before the second day of its being visible on the face, that possibly in those instances the eruption on the face might have been earlier than it was taken notice of. In one patient no cough nor sneezing was complained of till the day

of the eruption. The appearance of this distemper does not at all mitigate the symptoms, as it does in the small-pox. One patient was seized with a spitting on this day, which continued to tease him for forty-eight hours, without suffering him to rest at all by day, or to sleep by night; the cough in the meantime almost ceased, and all the other symptoms were as mild, as in a favourable sort of the measles.

2d. I have scarcely ever observed the eruption on the hands and arms fail of being perceived in the course of this day; and where it has been supposed to have been deferred a day longer, it is most probable that there was an error in dating the beginning of the eruption. Once or twice the distemper has been observed never to have reached the arms, which throughout the whole of it showed none of the usual spots. On this day the measles appear in full vigour upon the face, but without any relief of the symptoms, which are often rather aggravated, and a diarrhoea has been joined to them, but without any danger. The nose has bled about this time, and the eyelids have been so swelled, that for twenty-four hours they could not be opened.

3d. Now the eruption usually appears very lively on the other parts, but is a little deadened upon the face; yet in several the marks on the face have been at this time of as bright a red as ever. In others I have observed them to disappear entirely on this day, and all the other symptoms likewise to retreat. However, the cough and fever most commonly continue the same; some patients have thought them a little better, others a little worse. Where the eyes have been very watery, and the eyelids red, they have still remained so to this time; and I have noted a very troublesome and constant sneezing, which first came on upon this day. A child five years old became comatose the third day of the eruption, and died the next.

4th. The spots in most patients become of a much paler colour in the face, and begin to grow fainter in the breast and arms of some; in others the arms are of as high a colour as ever: yet in more persons than one I have observed no diminution of the colour even in the face on this day. Those, who have shown the least remains of the eruption at this time (and some have shown hardly any) have appeared the best; and in those, where it was still in undiminished vigour, the cough and fever have been the worst. The cough in several is very sensibly abated on this day; others find both cough and fever as bad as ever. The eyes seldom continue to water any longer, except where they have been so hurt by this illness, as to continue weak for a long time after. The sneezing has lasted till this time: but this has very rarely happened. The face now begins to be branny and itch, which itching is propagated over the whole body, so as to be the chief, or only complaint. The catamenia have appeared on this day before their regular time.

5th. The marks are very pale both in the face and arms, though perceptible in some: in others they are quite gone, the appetite returns, and the patients seem well. Those patients have been the

worst, in whom most of the eruption was still remaining. The cough in some is much better, in others it is quite gone; but several are teased with it a long time after the distemper is ended. The menses have made their appearance on this day, out of their regular course.

6th. The vestiges of the eruption have been still visible on the arms, and even in the faces of a few patients, with a considerable degree of cough, sneezing, hoarseness, and fever; and I have once or twice seen some marks of the measles so late as on the tenth day of the eruption; but on the sixth day most patients are tolerably well recovered, except in those unfortunate cases, in which the fever, instead of abating, begins at this time to increase, and continues to do so, until it have destroyed the patient. In others, who escape this immediate danger, the lungs are sometimes so injured by this distemper, that a lasting cough succeeds; and sometimes a pulmonary consumption. Weak eyes, inflamed eyelids, glandular tumours, and many other scrofulous appearances have followed the measles; whether they were formed by them, or, the seeds being before in the constitution, were only excited by this distemper; or possibly the appearance of scrofulous symptoms was wholly owing to other causes, and would have come on at this time though there had been no measles.

Bleeding may be used at any time of the measles, and is always beneficial where the symptoms are very distressing, particularly if there is an oppression of the breath, to which every stage of this distemper is liable. Bleeding, together with such medicines as the occasional symptoms would require in any other fever, is the whole of the medical care requisite in the measles. The flowing of the menses ought to be no objection to the opening a vein, if the cough and shortness of breath make it otherwise advisable. I never saw any bad consequences from bleeding a woman in these circumstances; but the greatest danger might attend the omitting to do it in a violent cough, or oppression of the breath.

The measles are far less dangerous to pregnant women, than the small-pox. I have attended several, who were greatly harassed by the violence of all the usual symptoms in this illness, but I never knew it to make one woman miscarry, or be in more danger on account of the pregnancy.

Is not this distemper worse in proportion to the quantity of eruption, as in the small-pox?

The preparatory symptoms of the measles have appeared thirteen days after the infection had probably been received. In two others there was the greatest reason to judge, that they began to come on fourteen days after the time of infection. In four others the infection seemed not to have lain dormant above ten days.

An infant sucked a nurse till the measles appeared upon her, and then was taken away, and escaped catching the distemper; is it therefore like the small-pox, not infectious in its first stage? or did the incapacity of this child's receiving the measles at that time arise from some other cause?

CHAPTER LXIV.

Narium Hæmorrhagia.

A SPONTANEOUS bleeding of the nose more particularly belongs either to children, or to such as have past the meridian of life. In children it seldom comes to any excess; but in adults will continue so long, or with such violence, that many pounds of blood will be lost, or the person faint away.

Weakly children seem more subject to it than the strong; and among adults, beside its being an usual attendant upon the diseases of the liver in hard-drinkers, it often accompanies the gout, headache, giddiness, numbnesses, a broken state of the health, and threatenings of a palsy or apoplexy.

In a few extraordinary cases I have known it come on a little before the catamenia, and continue till after they were over: in some females it has seemed to supply the place of the menstrual discharge; on the other hand, that discharge has proved, as long as it continued, an effectual stop to a bleeding of the nose, in some, who were never free from it for so many days together at any other time.

The loss of blood by the nostrils is perhaps a symptom of some internal morbid cause, rather than a remedy; for it has not appeared to me to be of any certain use in those distempers with which it is joined, and therefore it is not a desirable evacuation. But, on the other hand, it is far from being a constant sign of any great mischief either present or impending; for I have known it continue in persons of an advanced age for many years, consistently with very tolerable health. An old headache has been judged to be relieved by a bleeding of the nose; but this is made doubtful by its having been a companion in other cases of headaches, and various disorders of the head, without affording them any mitigation.

Nothing so effectually stops a profuse bleeding of this part, as a compress put up the nose, when it is possible to apply it to the mouth of the bleeding vessel; but where this cannot be done, I know no other method of cure, than what is mentioned in the Medical Transactions, vol. ii., Query 4.* In habitual bleedings of the nose, a moderate dose of some purging salt has been given twice or three times a week with success.

CHAPTER LXV.

Nausea.†

PREGNANCY, the gout, hard drinking, hypochondriac disorders, giddiness, violent headaches, a cough, and particularly the hooping-cough, worms, a stone in the kidneys, and irregularities of the menses: all these causes, beside blows on head, and many fevers, and strua:

* See Appendix.

† See chapter xcix., *de Vomitu.*

the improper quality or quantity of the food, are apt to disorder the stomach, and to bring on a nauseating and sickness ; which is sometimes preceded by a large quantity of water filling the mouth. The morning is the time when this sickness is commonly greatest (the nerves of the stomach, like all the others, seeming to be weakest in the morning) ; it will likewise come on sometimes about three hours after dinner.

As this complaint is owing to such a variety of causes, it might easily be expected, as it is found to happen, that the same method of treating it will not always have the same success. An emetic, lying down, aromatic and spirituous medicines, a spontaneous or artificial purging, essential oils, and opium applied to the region of the stomach in the form of a plaster, or in the form of a liniment rubbed over the abdomen, the juice of lemons and salt of tartar drunk in the act of effervescence, infusions of common mint with or without *tinctura opii*, are sometimes, but not always employed with advantage in curing a nauseating fit. Infusions of camomile flowers will often relieve, by provoking a vomit, or only by strengthening the stomach. In cases where it is a symptom dependent upon other disorders, its cure can only be effected by curing the principal malady. Bath waters drunk warm at the spring will remove several of the causes of sickness, and perform a lasting cure.

CHAPTER LXVI.

Oculorum Morbi.

A WEAKNESS will sometimes attend the eyes, and make the wind, the fire, and reading very uneasy to them, though there appear no outward sign of any complaint. A greater degree of weakness is accompanied with wateriness, or gumminess, where the tears are not supplied faster than they can dry into such a consistence.

Strumous inflammations of the eyelids will long be troublesome without much affecting the eye, or making it impatient of the light or of reading. Where the eye itself is inflamed, all that part which should be white will have its vessels distended, and be red with blood : it feels as if it were full of dust or sand, and any degree of light is intolerable ; wind, heat, and dust, greatly aggravate the inflammation. If the inflammation excite no great pain, while the eyes are kept dark it has continued for a year or longer, without ending in blindness ; though it will often leave films, or specks upon the eye, which hurt the sight if they be upon the cornea, and in any other part are a deformity. But dimness of sight, and blindness, will sometimes follow long and violent inflammations. I have known the eye frequently inflamed by the irritation of hairs growing in the internal part of the eyelid and pricking the eye ; the plucking out of these hairs is the certain and only cure.

The eyes are subject to excessive and constant pain without any

outward appearances of disorder ; this has been known to last for several days ; and considerable pain at the bottom of the eye has continued for a year without any ill consequence ; but in general it is a state of the eye much to be dreaded. It has in six-and-thirty hours brought on a dimness of sight, which increased to blindness ; and it has by fits been troublesome for six years, and then blindness has come on.

In many instances the sight has gradually become dim, and at last been totally lost, even within the space of a few days, probably from the optic nerves becoming paralytic. I have seen this occasioned by a preternatural mass being formed in the brain, which compressed the origin of those nerves. A giddiness has been the forerunner of blindness ; and so have the appearance of an iris round the candles, of flashes of fire of flies or threads floating in the air, which are black in the day time and of a fiery colour in the dark, of colours dancing before the eyes, and of a multiplication of the objects : but at other times all these confusions of vision have happened, and some of them have continued for ten years, yet the sight has not afterwards been hurt.

A blindness will also come and go, lasting only a few hours, and this for several times, observing no certain periods ; unlike the nystalopia, which returns every night. The few blindesses of this sort, which I have known, have ceased at last, and left the eyes in their natural state. A blindness of the right eye has lasted for fourteen days, and then has suddenly passed to the left, where it fixed.

A cataract is always preceded by a dimness, or blue cloudiness of objects, as if they were seen through gauze ; it is known by the pupil of the eye, instead of being black, becoming coloured.

In affections of the eyes it is common to hear complaints of all objects appearing double ; I remember one who said they were quadruple.

A gutta serena is known by an unusual dilatation of the pupil, and by its ceasing to contract or enlarge according to the different degrees of light ; it seems to be a palsy of the optic nerves. It is sometimes confined at first to one eye, but in the course of a few years is often extended to both. It comes with so little pain, and the sight of one eye is so little missed, that I have met with three or four persons, who by accident found out that one of their eyes was dark, of which in all probability they had lost the sight for some months before. This will happen both in the gutta serena and cataract.

There is a dimness of sight, in which dark spots float before the eyes, or only half, or some part of all objects appear, which continues for twenty or thirty minutes, and then is succeeded by a headache lasting for several hours, and joined sometimes with sickness. The disagreeableness and pain of these paroxysms are very considerable, but as far as I have observed, the danger is nothing, though I have known some persons subject to them for twenty years. Their returns seem to observe no certain period, nor have I even been able

to guess at the immediate occasions of bringing them on, nor to discover any remedies either for their cure or relief, except that lying down appears to make the fit more tolerable, if not to shorten it. It is less in summer and warm climates, and age seems to lessen or cure it. Emetics have done no good; it has even been suspected that they rather did harm.

A violent giddiness has suddenly made a person presbyops, or long-sighted; and I have known two persons, who after having been unable to read without the help of convex glasses for several years found their sight come of itself to its natural state, so that they had no further occasion for spectacles. A giddiness has instantly brought on squinting, and made all objects appear double for twenty days, at the end of which the squinting and doubleness of objects ceased. The same thing happened to another every morning just after waking, and continued for some time.

Many are persuaded that perpetual blisters weaken the sight. To which notion we may be tempted to pay very little regard, when we consider, that they are frequently applied with advantage in disorders of the eyes; and further, the little probability, which appears from all the known effects of cantharides, that they should particularly affect this part; and lastly, the great number of persons, who keep a blister for many years, or even a considerable part of their lives, without finding reason for suspecting any such mischief. But, on the other hand, we so often meet with those, who are confident upon repeated trials, that during the application of cantharides their eyes were growing weaker, and that they recovered upon the leaving the blisters off, that we can with difficulty account for the rise and prevalence of this opinion, without its having some real foundation in nature.

Various parts of the eye are liable to ulcers and cancers.

Weak and watery eyes may often be assisted by taking twice a week some purging water, and twice every day a wine-glass of the decoction or infusion of the bark. For this, and for some painful affections of the eyes, many washes are recommended, as white vitriol, flowers of zinc, tutty, saccharum. Saturni, spirit of wine, or milk and water. From the use of any of which ingredients I have never observed any such certain benefit, as to make me sure that a wash of pure water would not have been as useful.

Strumous inflammations of the eyelids, where the eye itself is but little, or not at all affected, do not require bleeding; but where the eyes themselves are inflamed, nothing can be done without frequently taking away some blood. Of all the ways of doing which, I prefer leeches applied to the temples or behind the ears, and it is sometimes necessary to have recourse to them once or twice a week for several weeks. Cataplasms of conserve of roses, or of the pulp of boiled apples, or of bread and milk, put between two pieces of very fine lawn, and applied to the eyes at least every night, and if the pain and inflammation be considerable, both day and night, renewing them once in eight hours, are more serviceable than any

collyria. The purging waters, and bark, are perhaps the best internal medicines both in this, and in all other painful maladies of the eyes. It is useful always at bed-time to anoint the margins of the eyelids with a little lard softened with water, and wherever the eyelids would otherwise be glued together in the morning; for if this be not prevented, and any force be used to pull them open, it will not fail to increase the soreness and pain. Setons, issues, and blisters, will often be necessary to assist in the cure, and to prevent the return of these diseases.

In a gutta serena I have known issues, blisters, and all kinds of nervous medicines, strong sneezing powders, and a salivation, used without any success. Electrification is said to have been useful.

A cataract admits no remedy, except that of the depression or extraction of the crystalline lens.

It is observable that the ancients mixed opium with many of their topical medicines for the eyes; if we reason upon any of its known powers and manners of acting, we should judge that as an acrid it would do no harm, and as a soporific it would do nothing at all in this way of application; and probably should not judge amiss: for notwithstanding the prepossession in its favour from the authority of the ancients, this ingredient in collyria has sunk into disuse; for which nothing can account, but a conviction of its inefficacy from repeated trials. Yet by some late experiments three drops of tincture of opium, applied every day to the eyes, have been thought useful in ophthalmies.

Some oculists have succeeded in taken off films from the eyes with a knife, or with acrid applications. But this practice has been condemned by many experienced and judicious surgeons, as too likely to excite an inflammation; from which cause most of these films arise.

Of the Nyctalopia, or Night-Blindness.

A man about thirty years old had in the spring a tertian fever, for which he took too small a quantity of bark, so that the returns of it were weakened without being entirely removed. He therefore went into the cold-bath, and after bathing twice he felt no more of his fever. Three days after his last fit, being then on board of a ship in the river, he observed at sun-setting, that all objects began to look blue, which blueness gradually thickened into a cloud; and not long after he became so blind, as hardly to perceive the light of a candle. The next morning about sun-rising his sight was restored as perfectly as ever. When the next night came on, he lost his sight again in the same manner; and this continued for twelve days and nights. He then came ashore, where the disorder of his eyes gradually abated, and in three days was entirely gone. A month after, he went on board of another ship, and after three days stay in it, the night-blindness returned as before, and lasted all the time of his remaining in the ship, which was nine nights. He then left the ship; and his blindness did not return while he was upon land. Some little time afterwards, he went into another ship, in which he continued ten days, during which time the blindness returned only two nights, and never afterwards.

In the August following, he complained of loss of appetite, weakness, shortness of breath, and a cough : he fell away very fast, had frequent shiverings, pains in his loins, dysury, and vomitings ; all which complaints increased upon him till the middle of November, when he died.

He had formerly been employed in lead-works, and had twice lost the use of his hands, as is usual among the workers in this metal.

CHAPTER LXVII.

Ozæna, or a Suppuration of the Antrum Highmori.

AN oozing of matter from the cavity called *antrum Highmorianum* has continued for many months. The frequent injection of a liquor to cleanse it, was the only help which it seemed to admit. An infusion of camomile flowers is a very proper injection for this purpose.

CHAPTER LXVIII.

Palpitatio Cordis.

CHILDREN sometimes bring with them into the world a preternatural palpitation of the heart, together with a mal-conformation of the breast, or other signs of great unhealthiness ; and it is found, at all times of life, either following or joined with the asthma, hypochondriac and hysterical complaints, the gout, cutaneous diseases, too much care and business, flatulence, giddiness, faintings, languor, an urgent and troublesome micturition, and that general failure of the powers of life which is known by the name of a broken constitution. It has been attended with a perceptible noise, and rarely fails to make the pulse very irregular both in time and strength.

The resemblance which this disorder bears to those complaints that are called nervous, and which are exasperated by bleeding, allows us very little hopes of relief from the use of this evacuation ; yet in one or two cases I have known it tried without any manifest hurt, and, as the patient supposed, with some benefit. Lying down also has in one person not increased, but rather eased the palpitation. In every other case, which I have observed, the bed has constantly aggravated this uneasy sensation, which has usually been worst of all just upon waking out of the first sleep. A full stomach is not easily borne by these patients.

If we consider the rapid and irresistible progress of this complaint from bad to worse in some, and the very little disordering of the health which it occasions, together with the length of time which it continues in others, and the long truces, during which it is wholly suspended ; and lastly, that it will be excited in the healthiest persons by a mere thought of the mind, we must necessarily conclude

that it is owing to a variety of causes widely differing from one another in point of danger. Where it is curable, and requires a remedy, it must be found among the medicines which are proper in nervous maladies ; but a palpitation of the heart in many instances arises from causes too fatal to admit, or too frivolous to stand in need of any cure.

CHAPTER LXIX.

Paralysis et Apoplexia.

PALSIES and apoplexies are only different degrees of the same distemper. All sudden deaths are put down to the account of apoplexies ; though some of them be unquestionably owing to ruptures of great blood-vessels, to suffocations from inundations of phlegm, or from the breaking of abscesses in the lungs, and other causes of imminiate death, very different from those by which genuine apoplexies are produced. A sudden, or rapid weakness in some of the muscles of voluntary motion, constitutes a palsy, and in this manner it most usually begins ; and a total loss of motion in every part of the body except the heart and organs of respiration, together with insensibility, is called an apoplexy ; the cause of which is sometimes strong enough to put a stop to the motion even of the heart and lungs, and to occasion instant death.

The power of moving in every part of the body by means of the muscles which obey the will, or by means of others the actions of which are involuntary ; the various perceptions by the five external senses ; and lastly, those mental powers named memory, imagination, attention, and judgment, together with the passions of the mind ; all these seem to be exercised by the ministry of the nerves : and are impaired, disturbed, or destroyed, in proportion to any injury done to the brain, the spinal marrow, and nerves, not only by their peculiar diseases, of which we know little, but by contusions, wounds, ulcers, and distortions, and by many poisons of the intoxicating kind. The loss of the power of moving is the obvious and striking character of this disease, and what is chiefly meant by the name of a palsy ; and it sometimes happens that one or more limbs may become paralytic, with little or no perceivable defect in the office of those nerves on which the senses and operations of the mind depend. It is perhaps more rare, but by no means unknown, that from a paralytic shock one or more of the external senses have lost the exquisiteness of their perception, or the mind has become inattentive, forgetful, and stupid, with very little diminution of muscular strength : but it is most commonly found, that the bodily strength, and senses, and mind, all suffer from a considerable stroke of a palsy. Certain degrees of a paralytic debility of the senses and intellects, have had particular names assigned them, as carus, coma, lethargy. The reasoning faculty has in a palsy become dull and wild to such a degree as to amount to melancholy, idiotcy, and madness. Likewise madness and palsy have returned alternately. An

epilepsy in some instances partakes so much of the palsy or apoplexy, that it is hard to determine which symptoms are most predominant, and to which of these diseases the fit most properly belongs. The same is sometimes observable in the disease called St. Vitus's dance.

Paralytic complaints chiefly attack those who are past the meridian of life, and are either sinking into the infirmities of age, or are broken with them and other disorders. But the middle ages are not secure, especially where persons are born of paralytic parents, or have impaired their health by fatigue, or intemperance. Children of all ages from infancy to puberty have sometimes lost the use of their limbs without any other manifest disposition to ill health; but this has happened more frequently to the weakly, and to those whose constitutions had been shattered by convulsive fits, by epilepsies, and St. Vitus's dance. The gout disposes the subjects of it to apoplexies, either by a general debilitating of the powers of life, or by some affinity between the causes of the two distempers. There appears some tendency, though a more remote one, in hypochondriac and hysterical ailments to be aggravated till the shattered state of the nerves become truly paralytic. Chronical rheumatisms, or imperfect gouts, after hanging on for many months, have deadened and perfectly destroyed all ability to stir the limbs affected; but this species of palsy has gone no further; so that the senses and faculties of the mind have still continued in their usual vigour. It is observable, that palsies arising from chronical rheumatisms, or imperfect gouts, affect chiefly the lower limbs; but those arising from the colica Pictorum more usually affect only the arms and hands. So many women otherwise healthy have been struck with a loss of their limbs, and an imperfection of utterance, and sometimes with fatal apoplexies, in the pregnant and puerperal state, that I can have no doubt of their being liable to these mischiefs in consequence of these peculiar situations. One palsy, which had this origin, hardly went off in two years; but from other palsies of the same kind most women have entirely recovered, and in no long time, and without any relapse. The child of a mother, who during her breeding became paralytic, was born in perfect health.

Many palsies of a small part, or of one half of the body, have begun with an apoplexy, or a sudden and total abolition of the strength and senses, which has continued from less than a minute to many hours; and the patients have been so far from having any previous notice, that for a few hours, or a few days before the fit, they have found themselves uncommonly well and cheerful. But more palsies have advanced gradually, without the patient's falling down in a motionless and senseless state: and the approach of some has not hindered the person from remaining in the full possession of his understanding. A faltering and inarticulation of the voice, drowsiness, forgetfulness, a slight delirium, a dimness of sight, or objects appearing double, trembling, a numbness gradually propagated to the head, a frequent yawning, weakness, distortion of the mouth, a

palpitation, a disposition to faint ; some, or most of these, have preceded a palsy for a few minutes, or for some hours, or even for a few days ; and a weakness of a limb, or of one side, has been many months, or a few years, gradually increasing to a perfect loss of one side, or a hemiplegia. I have known a sleepiness and duplicity of objects with violent pains and tightness of the head for two days, then the senses and voice were lost, and on the third the man expired. A numbness of the hand has come on the first day, on the second a faltering of the voice, and a palsy on the third. Similar instances are very common. The notices of an approaching fit have come and gone for several hours, as if there were a struggle between the disease and the constitution, before these threatenings have either wholly disappeared, or ended in palsy. Violent pains of the head, or a weight, and tightness, as if it were surrounded with a stiff bandage, giddiness, numbnesses, noises in the ears, and a frequent bleeding of the nose in adults or old persons, may probably proceed from a slight degree of some paralytic cause ; but they have continued for a considerable part of a man's life without being joined by any other mischief, and therefore are by no means reasons for much alarm, though they may justify the use of some precautions. Flashes of fire, or dark spots before the eyes, have preceded some apoplexies, but have for the most part no relation to them, being merely disorders of the eyes, and not proceeding from any general affection of the nerves. A palsy of the lower limbs has often been preceded by a great pain in the loins.

Where the origin of all the nerves is injured, all their functions are consequently affected. In practice there occur instances of all possible varieties in paralytic affections of the nerves, from the numbness and weakness of a single joint of one of the fingers, to a total abolition of sense and motion throughout the whole body, or a fatal apoplexy ; and there is an infinity of intermediate degrees between these two extremes. The muscles of the lower lip have been paralytic, and no other part of the body. It is not very uncommon to see this happen to the muscles of one or both the eyelids ; and a still more frequent palsy is that of the organs of speech, taking away all power of speaking articulately, or of speaking at all ; and that also of the muscles of one side of the face, which suffers that corner of the mouth to sink lower than the other, and hinders the meat from being easily moved about in mastication, and sometimes lets the spittle and drink run out of the mouth. In one person a palsy of the right side of the face was attended with an exquisite pain behind the right ear ; and in another a like pain behind the left ear was joined with a palsy of the left side of the face. The paralytic weakness has been confined to the muscles of deglutition, or to those of the tongue. One arm, one leg, a hand, or a single finger, have been the only parts affected. The muscles of the thighs and legs have frequently been the seat of the distemper, having lost all power of contraction, and so have at the same time the sphincters of the bladder and rectum, so that the urine and feces could not be re-

tained: in other instances of a palsy of the lower limbs, these excrements have been with difficulty expelled, the muscles serving to their expulsion having been more weakened than the sphincters. Scarcely any species of palsy is more common than the hemiplegia, in which the motion of one side is impaired or lost, from the forehead to the extremity of the foot. The right and left side are equally disposed to be paralytic; at least it appeared so in a great number of patients, in whom a particular attention was paid to this circumstance. The same paralytic cause seems determinable by slight and unimportant accidents to fix upon one side, rather than another; for I have noted eight persons, who had recovered from a hemiplegia, and in a subsequent attack were struck on the opposite side.

Though paralytic persons often find the perception of the five senses dull and confused, yet I attended one, whose sense of smelling, instead of being impaired, became so exquisite, as to furnish perpetual occasions of disgust and uneasiness, and from some very ridiculous causes. A lethargy in another patient was succeeded by a sleeplessness, and at the same time all the external senses became more acute: but I do not remember any other instances of a palsy, in which the functions dependent upon the nerves (if at all affected) were not altered for the worse; except that the appetite has in some cases become more keen. No symptom is more common in this disease, than a numbness, or some degree of a loss of feeling; and yet a total loss of it is extremely rare. Out of the very great number of palsies, which I have seen, there have been only seven in which the sense of feeling was annihilated. In three of these the feeling was totally gone, while some motion remained; and in another it did not return, though some degree of motion was restored. In a fifth the feeling began to return in half a year. In the two others neither the feeling, nor motion, were ever, as far as I knew, retrieved.*

Of all the powers of the mind, the memory, and the government of the passions, appear to be the most weakened in palsies, though it may be doubted whether they be more affected than the imagination or judgment. There are perpetual occasions for showing the loss of memory, and that childish impotence of mind, which suffers a man to fall into tears, or to be transported with joy and anger for frivolous causes; but the exercise of the imagination and judgment are more seldom called for, and therefore their usual powers will not be so readily missed. The faculties of the mind are enfeebled in all possible degrees, as well as those of the body. When a person therefore has been struck on the left side, and has at the same time lost his voice, there is no certainty of his being able to signify his feelings, or his wants, by writing. They, who have been put upon this, have sometimes been able to do it, though in a confused manner; and the same person on different days would either write intelligibly, or make only an illegible scrawl. The shock upon the un-

* Ramazzini mentions a case of palsy in which one leg had lost all power of motion, but preserved its sense of feeling; and the other leg was deprived of its feeling, but retained its motion. — *De Morb. Artif.*, p. 286. — E.

derstanding has been such, that it was not possible to make the patients mark upon a slate *yes* or *no*, or point to them when written, so as to make a right answer to any question. The inability to speak is owing sometimes not to the paralytic state of the organs of speech only, but to the utter loss of the knowledge of language, and letters; which some have quickly regained and others have recovered by slow degrees, getting the use of the smaller words first, and being frequently unable to find the word they want, and using another for it of a quite different meaning, as if it were a language which they had once known, but by long disuse had almost forgotten. After an apoplectic state for several days (owing to a blow upon the head) one person was forced to take some pains in order to learn again to write, having lost the ideas of all the letters except the initials of his two names.

A palsied arm has been accompanied in many persons with an excessive pain about the shoulder, so that they could hardly be persuaded that there was no fracture nor dislocation. Costiveness is an attendant upon this distemper, where the stools do not come away involuntarily; but it is usually accompanied with an uncommon flow of urine. A paralytic affection of one side has appeared, upon opening the head, to have been occasioned in some by a hurt, or some preternatural state of the brain on the same side, and on the opposite side in others.

The general rule in a hemiplegia is, that if the patient recover, the motion of the leg begins first to be gained, and afterwards that of the arms; but to this rule there are many exceptions. In a slight palsy of the tongue, it has felt as if it had been scalded. The apoplectic fit rarely goes off without leaving some part paralytic; however it is not often that an apoplexy or palsy proves fatal in the first attack; but whoever has suffered from either of them, the same person is more likely to be affected again; and the more frequently the fits have returned, the sooner and more certainly is a fresh attack to be expected. Yet it has happened, that persons have been restored from a strong attack of a hemiplegia, and have had no relapse in fourteen, eighteen, or twenty years. It must be owned indeed that such cases are rare, and that a violent degree of palsy, how well soever it may seem to have been cured, seldom fails to be repeated within the space of a few years, and it has frequently returned in a few months.

It is not uncommon to recover from a palsy of a small part, as of one side of the face, without any ill effects upon the health; and, though it happen in youth, without experiencing any return to extreme old age. After the first considerable shock there are often repetitions of smaller fits, which, by coming in the night, or during a nap, are not observed, but may be conjectured by several circumstances, and particularly by all the effects of former attacks becoming much worse either suddenly, or in a few hours. There is particular danger of these repetitions for several days after a great fit, till the constitution have a little recovered from the violence which it has

suffered ; and if the patient escape these, yet after a strong fit the functions ascribed to the nerves are every day more and more enfeebled, though without any fresh access of the distemper. The general health does not always suffer in proportion to the apparent violence of the attack. Some slight fits have been succeeded by a great and irremediable feebleness both of body and mind. After all fits, there is too apt to be left some degree of headache, giddiness, inattention, forgetfulness, sleepiness, slight delirium, inarticulation of the voice, hiccup, tremblings, weakness, cramps, and involuntary or causeless laughing and crying. Among the many ill consequences of apoplexies I have seen one good one, and that was in an epileptic person, who never had any return of the epilepsy after an apoplectic fit. But at other times it has happened, that an epilepsy first came on after a stroke of a hemiplegia ; and the same has been followed in a child by St. Vitus's dance. A long unsteadiness and trembling of the right hand entirely ceased, and the person, who had been a remarkable penman, was able to write again as finely as ever, upon being attacked with a palsy of the left side.

I know no certain rule of judging how long a person may be struggling with an apoplexy or palsy, before he sinks under them, or begins to recover. A perfect apoplectic fit, in which no signs of life remain beside the motion of the heart and lungs, is seldom seen unless for a few hours before death. A less complete apoplexy, but yet without any sense, or voice, or power of swallowing nourishment, has continued for ten days before it proved fatal. A hemiplegia has been followed by death in a few months, in a few days, or in a few hours, and most commonly by an apoplectic fit supervening. But where a person has either been struck at first only with a hemiplegia, or has recovered into this state from an apoplexy, there most usually, instead of growing worse, the patient has been found to recover from some of the symptoms, and sometimes, though very rarely, from all of them. The signs of a beginning recovery have sometimes been perceptible in a few minutes, and sometimes have been delayed for several days, or even for some months, and the symptoms have been gradually retreating for several years. A man of eighty has recovered in two months. The use of the legs even in an old man has been regained after nine months, so that he was able to walk. In one hemiplegiac the motion of the parts began to return so late as the end of the second year. Two paralytic paroxysms in an old asthmatic man left no traces behind them, and he continued well for more than ten years. Many who have been almost in a senseless state with a hemiplegia, have been perpetually at work with their sound arm in shoving the bed-clothes from their breast. If the hemiplegiacs are desired to try if they can move the affected arm, they all of them presently take hold of it and move it about with the other hand. The most melancholy scene of this distemper is, when it has kept weakening all the powers of the body and mind by very slow degrees, and letting loose the passions almost to madness, so that a man survives himself for several years, and is at last reduced to a most

miserable state (if he knew his own misery), in which he is unable to stand, to talk, to feed himself, or to retain his urine or stools, and yet lives on in this helpless condition for many months. Those who are near their end in an apoplexy, very remarkably puff out both their cheeks in every expiration.

It is probable that far the greater part of paralytic and apoplectic patients would recover some degree of life and strength by the unassisted efforts of nature. Hence arises a difficulty of ascertaining the real efficacy of any means which may have been used, unless often repeated trials should be found to have an uniform effect. Whenever any one falls down in an apoplectic fit, or is suddenly struck with a palsy, it is necessary in the first place to loosen whatever bandage may be about the neck ; for upon the access of these distempers I have known it instantly swell to such a size, that the person without this relief would be in danger of being strangled.

Bleeding is one of the first means usually employed for the recovery of an apoplectic person ; and if he be in the vigor of his age, or very plethoric, and accustomed to living in a full manner, it seems a very fit remedy, and likely to be highly beneficial. But an indiscriminate use of large and repeated bleedings in all apoplexies and palsies can hardly fail of being often attended with mischief, since the young and vigorous are not the most frequent victims of these maladies, but rather sickly children, and the old, the infirm, and exhausted, in whom the *vis vitæ* wants to be excited, rather than lowered, and where bleeding will damp every effort of nature, and irrecoverably extinguish the small remains of life, as it is found to do in drowned persons. The practice of taking away blood must be founded either in experience, or theory ; and if I were to judge from the cases, which have occurred to me, I should say that the occasions, where it could be supposed to do good, have been extremely few, and that large bleedings have several times appeared to me to be prejudicial.

Theory may teach, but will find some difficulty in proving, that apoplexies must arise from a compression of the brain, owing either to a distension of the blood-vessels, or to extravasated blood from their rupture, and that the energies of the nerves can be deadened by no other cause beside fulness. The usual subjects of palsies, as before mentioned, do not favour this hypothesis ; and the operation of several poisons in disturbing or annihilating the nervous functions can hardly be accounted for by such a theory : as little can it be reconciled with the gradual manner in which most palsies, and many apoplexies, are found to advance, and with the strong disposition to relapses in those who have been emaciated and broken by many former fits. Some palsies must be owing to other causes besides fulness ; and whatever these causes be, they may be the only ones of most palsies. A rupture of some blood-vessels in the brain may be the origin of some apoplexies, but probably of few ; because these can hardly escape being instantly fatal ; and we know that there is a far greater proportion which do not end in present death. Some practical authors tell us they have been glad of finding a fever in a

paralytic; or desirous of exciting one. This but ill accords with the evacuating, and cooling regimen. But I must own that I have no faith at all in this doctrine; for, according to all my experience, the more fever there is, the worse it always fares with the patient, in every external and internal ail; and the more natural the pulse is, the more hopes there will be of a prosperous event.

I have known the gout seize persons ill of paralytic complaints, without at all fulfilling the expectations of the patients and their friends by giving them the least relief; but this cannot appear strange to any one, who considers that the gout appears from experience to be rather a cause than the remedy of apoplectic diseases. No circumstances have encouraged me to hope for benefit from giving any other emetic than a little carduus tea, in order to make the person vomit more easily, and empty the stomach more effectually, where it was pointed out by the sickness and retching of the paralytic patient. A purge, if it can be given, or a sharp clyster, which may both unload and stimulate the bowels, is always useful; but violent purging has appeared to do harm, rather than good. Blisters should be applied as soon as possible to the head, between the shoulders, and to the paralytic limbs.

The medicines proper to be given, when the patient is sufficiently recovered to be able to swallow, are such as have the general property of strengthening and invigorating; which purpose is well answered by one drop of oil of cloves mixed with a little sugar, and then added to an ounce and a half of an infusion of Peruvian bark and bitters, which may be given every four hours. Musk, wild valerian root, and camphor, are also recommended as specifically friendly to the nerves, and possessed of virtues, which revive their languid motions, and soothe their irregular ones. The root of valerian has often been given without much apparent effect; but yet I have met with some, whom it threw into such agitations and hurries of spirits, as plainly showed that it is by no means powerless. Most cats are fond of gnawing it, and seem to be almost intoxicated by it into outrageous playfulness; and the nerves of cats afford a very tender test of the powers which any substances possess of affecting the nerves. The poisoned darts of the Indians, tobacco, opium, brandy, and all the inebriating nervous poisons, are far more sensibly felt by this animal than by any other, that I know, of an equal size.

When the patient is judged to be pretty well out of the reach of present danger, he must in the next place be assisted in freeing himself from the several disagreeable relics of the former attack, and in preventing a return. For these purposes a journey to Bath is generally proposed: about which physicians seem to be divided in their opinions; some thinking, that the drinking and bathing at Bath help to recover paralytics, while others are persuaded that they are the ready means of turning a palsy into an apoplexy. If I were to judge from my own experience, I should say that the Bath waters do neither good nor harm to these patients; some of whom gradually

recover while they stay at Bath ; and others suffer a fresh attack and die there ; just as they would in any other place. I therefore cannot advise Bath ; but if it be desired by the invalids themselves, or any of their friends, there is no reason to hinder their going thither. There is not much more to be said in favour of the cold bath. Out of a great number of persons, whom I have known to use sea-bathing for several successive seasons, and long courses of cold bathing in weakness and giddiness left by palsies, some have thought them prejudicial, and more have thought them useful : but from all their accounts I have concluded, that cold bathing is innocent, or in a small degree beneficial. So that the chief reason against advising, or allowing it, is, that paralytics are liable to relapses of their disorder, let them do what they will ; and if any fresh access, or aggravation of their symptoms should happen at the time of using the cold bath, or soon after, it would of course be charged, though very unjustly, to the bathing.

Sleep is the great restorative after labour, and indispensably necessary to life ; yet it unquestionably disposes the body to be invaded by all those diseases which are peculiarly attributed to the infirm or disordered state of the nerves, and among them to apoplexies and palsies, many of which first appear, or are much aggravated during sleep. In all these maladies therefore it behoves those who wish to be restored from what they still suffer, and to prevent any further mischief, to be cautious of indulging themselves in sleep, and to be contented with as moderate a portion of it, as is found consistent with their general health.

An issue should be made in the neck, as soon as the blisters are all healed, and should be kept open during life. The symptom of giddiness is moderated in those who can bear this small loss of blood, by taking away six ounces by cupping-glasses, more than by any other means : this has been well borne by those who could not bear the loss of blood from a vein by a lancet. I have known it experienced in several, and particularly in a woman of sixty-eight, who had such bad fits of it, as made her several times fall, and frequently threatened an apoplexy. She began the cupping at that time of life, and used it constantly every six weeks until she died, which happened at the age of eighty-five. She was in no danger of ever forgetting it ; for she felt the most evident marks of wanting this relief, whenever she deferred it beyond the usual period. During all this time the giddiness was inconsiderable, and came but seldom. She was struck at last with a palsy, which had probably been kept off for many years by this practice of cupping.

When I knew no more of physic than what I had learned from books, I was very apprehensive, as I was taught to be, and by plausible reasoning, that opium was hurtful in palsies and apoplexies ; for it is supposed to have the effect of deadening the powers of the nerves, and therefore must be improper where we want to enliven them. This hypothesis, however specious, wants the attestation of experience. I have met with some, who, while they were recovering from a palsy, used opium plentifully, and afterwards never passed

a night without taking twenty or thirty drops of tinctura opii for many years: which practice did not hinder them from being very well, and was supposed to assist in making them so. In consequence of these examples, I have frequently given it in paralytic cases where the restlessness seemed to require it, and with as much advantage as in any other distempers.*

The good success of electricity in paralytic maladies has not yet been sufficiently ascertained; but it evidently has some influence over the nerves. An intermittent fever has more than once, during the fit, been attended with paralytic symptoms; but these have all yielded, together with the fever, to the Peruvian bark.

A Case of Catalepsy.

26th June, 1764, in St. Thomas's hospital, I saw a woman six-and-thirty years of age motionless with a fit of the catalepsy. Her pulse was quite natural: her breathing easy. Her eyes were fixed, as by attentive contemplation, not like those of a person who is either dying or sick, or under any pain or uneasiness. Her limbs all retained the situation in which they were placed by the by-standers, however inconvenient. I extended her arm, and saw it remain stretched out for twenty minutes; and I was told it continued so on a former trial above an hour, which scarcely any body in health could support. I heard even that it would remain extended with a weight of seven pounds in the hand. If the patient was placed upright, she continued upright, and was not very easily thrown down. While she was sitting down both the legs were extended, and raised from the ground; and they remained in that uneasy posture, as if they had been made of clay, or of wax. Her mouth was closed, and I was unable by any means to open it. The eyelids were constantly open; or if forcibly closed, they opened again as soon as the force was removed. She winked, but in a very slight manner, upon moving the finger quick towards the eye; at other times the eyelids did not move. At the approach of a candle the pupil contracted. If the nostrils were compressed, after a little effort, and apparent struggle, the lips opened for the purpose of breathing. I heard that she had been in this state some months. The fits returned morning and evening almost every day, and continued sometimes an hour, at other times three hours. The nurse reported that one fit had lasted twelve hours. She used to be suddenly seized, without any previous notice.

CHAPTER LXX.

Pectoris Dolor.

BESIDE the asthma, hysterick oppressions, the acute darting pains in pleurisies, and the chronical ones in consumptions, the breast is often the seat of pains, which are distressing, sometimes even from

* M. Chapelain, médecin de Montpellier, avoit guéri un homme en apoplexie par un grain de laudanum.—*Acad. Roy. des Scien.* 1703, Hist. p. 57.

their vehemence, oftener from their duration, as they have continued to tease the patient for six, for eight, for nine, and for fourteen years. There have been several examples of their returning periodically every night, or alternately with a headache. They have been called gouty, and rheumatic, and spasmodic. There has appeared no reason to judge that they proceed from any cause of much importance to health (being attended with no fever), or that they lead to any dangerous consequences ; and if the patient were not uneasy with what he feels, he needs never to be so on account of any thing which he has to fear.

If these pains should return at night, and disturb the sleep, small doses of opium have been found serviceable, and may be used alone, or joined with an opening medicine, with a preparation of antimony, or with the fetid gums. Externally, a small perpetual blister applied to the breast has been successful, and so has an issue made in the thigh. A large cumin plaster has been worn over the seat of the pain with advantage. The volatile, or saponaceous liniment, may be rubbed in over the part affected. Bathing in the sea, or in any cold water, may be used at the same time.

But there is a disorder of the breast marked with strong and peculiar symptoms, considerable for the kind of danger belonging to it, and not extremely rare, which deserves to be mentioned more at length. The seat of it, and sense of strangling, and anxiety with which it is attended, may make it not improperly be called angina pectoris.

They who are afflicted with it are seized while they are walking, (more especially if it be up hill, and soon after eating) with a painful and most disagreeable sensation in the breast, which seems as if it would extinguish life, if it were to increase or to continue ; but the moment they stand still, all this uneasiness vanishes.

In all other respects, the patients are, at the beginning of this disorder, perfectly well, and in particular have no shortness of breath, from which it is totally different. The pain is sometimes situated in the upper part, sometimes in the middle, sometimes at the bottom of the os sterni, and often more inclined to the left than to the right side. It likewise very frequently extends from the breast to the middle of the left arm. The pulse is, at least sometimes, not disturbed by this pain, as I have had opportunities of observing by feeling the pulse during the paroxysm. Males are most liable to this disease, especially such as have past their fiftieth year.

After it has continued a year or more, it will not cease so instantaneously upon standing still ; and it will come on not only when the persons are walking, but when they are lying down, especially if they lie on the left side, and oblige them to rise up out of their beds. In some inveterate cases it has been brought on by the motion of a horse or a carriage, and even by swallowing, coughing, going to stool, or speaking, or any disturbance of mind.

Such is the most usual appearance of this disease; but some varieties may be met with. Some have been seized while they

were standing still, or sitting, also upon first waking out of sleep : and the pain sometimes reaches to the right arm, as well as to the left, and even down to the hands, but this is uncommon : in a very few instances the arm has at the same time been numbed and swelled. In one or two persons the pain has lasted some hours, or even days ; but this has happened when the complaint has been of long standing, and thoroughly rooted in the constitution : once only the very first attack continued the whole night.

I have seen nearly a hundred people under this disorder, of which number there have been three women, and one boy twelve years old. All the rest were men near, or past the fiftieth year of their age.

Persons who have persevered in walking till the pain has returned four or five times, have then sometimes vomited.

A man in the sixtieth year of his life began to feel, while he was walking, an uneasy sensation in his left arm. He never perceived it while he was travelling in a carriage. After it had continued ten years, it would come upon him two or three times a week at night, while he was in bed, and then he was obliged to sit up for an hour or two before it would abate so much as to suffer him to lie down. In all other respects he was very healthy, and had always been a remarkably strong man. The breast was never affected. This disorder, its seat excepted, perfectly resembled the angina pectoris, gradually increasing in the same manner, and being both excited and relieved by all the same causes. He died suddenly without a groan at the age of seventy-five.

The termination of the angina pectoris is remarkable. For if no accident intervene, but the disease go on to its height, the patients all suddenly fall down, and perish almost immediately. Of which indeed their frequent faintnesses, and sensations as if all the powers of life were failing, afford no obscure intimation.

The angina pectoris, as far as I have been able to investigate, belongs to the class of spasmodic, not of inflammatory complaints. For,

In the 1st place, the access and the recess of the fit is sudden.

2dly, There are long intervals of perfect health.

3dly, Wine, and spirituous liquors, and opium, afford considerable relief.

4thly, It is increased by disturbance of the mind.

5thly, It continues many years without any other injury to the health.

6thly, In the beginning it is not brought on by riding on horseback, or in a carriage, as is usual in diseases arising from scirrhous, or inflammation.

7thly, During the fit the pulse is not quickened.

Lastly, Its attacks are often after the first sleep, which is a circumstance common to many spasmodic disorders.

Yet it is not to be denied that I have met with one or two patients, who have told me they now and then spit up matter and blood, and that it seemed to them to come from the seat of the disease. In

another, who fell down dead without any notice, there immediately arose such an offensive smell, as made all who were present judged that some foul abscess had just then broken.

On opening the body of one, who died suddenly of this disease, a very skilful anatomist could discover no fault in the heart, in the valves, in the arteries, or neighbouring veins, excepting some small rudiments of ossification in the aorta. The brain was likewise every where sound. In this person, as it has happened to others who have died by the same disease, the blood continued fluid two or three days after death, not dividing itself into crassamentum and serum, but thick, like cream. Hence when a vein has been opened a little before death, or perhaps soon after, the blood has continued to ooze out as long as the body remained unburied.

With respect to the treatment of this complaint, I have little or nothing to advance: nor indeed is it to be expected we should have made much progress in the cure of a disease, which has hitherto hardly had a place or a name in medical books.* Quiet, and warmth, and spirituous liquors, help to restore patients who are nearly exhausted, and to dispel the effects of a fit when it does not soon go off. Opium taken at bed-time will prevent the attacks at night. I knew one who set himself a task of sawing wood for half an hour every day, and was nearly cured. In one also the disorder ceased of itself. Bleeding, vomiting, and purging, appear to me to be improper.

CHAPTER LXXI.

Pedicularis Morbus.

1762. AUG. 23. I was this day informed by Sir Edward Wilmot, that he had seen a man who was afflicted with the morbus pedicularis. Small tumours were dispersed over the skin, in which there was a very perceptible motion, and a violent itching. Upon being opened with a needle they were found to contain insects in every respect resembling common lice, excepting that they were whiter. Sir Edward Wilmot ordered a wash, consisting of four ounces of spirits of wine, four ounces of rectified oil of turpentine, and six drams of camphor. The day following he told me all the insects had been killed on being touched with this liquor, and that all the itching had immediately ceased.

* Cœlius Aurelianus, as far as I know, is the only ancient writer who has noticed this complaint, and he but slightly: "Erasistratus memorat paralyseos genus, et *paradoxon* appellat, quo ambulantes repente sistuntur, ut ambulare non possint, et tum rursus ambulare sinuntur." *Chron. lib. ii. c. 1.* — M Saussure in his *Voyage dans les Alpes* says, that at the height of 13 or 1400 toises above the sea, a peculiar tiredness often comes upon those who are ascending such high hills, so that it is impossible to proceed four steps further; and if it were attempted, such strong universal palpitations would come on, as could not fail to end in swooning. Upon resting three minutes, even without sitting down, this tiredness passes, and the power of going on is perfectly restored. The climbing of steep hills, which are not so high above the sea, does not occasion this peculiar fatigue. Vol. i., p. 482.

CHAPTER LXXII.

Phthisis Pulmonum.

A CONSUMPTION appears by the London bills of mortality to be in that city the most destructive of all maladies to adults; one in four of those that grow up to manhood being reported to be carried off by this distemper. But all these must not be charged to the account of a pulmonary consumption; because whoever decline and waste away by any obscure, unnamed distemper, are all charged to this article, though the lungs be not at all diseased.

The phthisis pulmonum usually begins with a dry cough, so slight and inconsiderable, that little or no notice is taken of it, till its continuance, and gradual increase, begin to make it regarded. Such a cough has lasted for a few years without bringing on other complaints. It has sometimes wholly ceased, and after a truce of a very uncertain length it has returned, and after frequent recoveries and relapses, the patient begins at last to find an accession of other symptoms, which in bad cases will very soon follow the appearance of the first cough. These are, shortness of breath, hoarseness, loss of appetite, wasting of the flesh and strength, pains in the breast, profuse sweats during sleep, spitting of blood and matter, shiverings succeeded by hot fits, with flushings of the face, and burning of the hands and feet, and a pulse constantly above ninety, a swelling of the legs, and an obstruction of the menstrua in women; a very small stone has sometimes been coughed up, and in the last stages of this illness a diarrhoea helps to waste the little remainder of flesh and strength.

A spitting of blood has sometimes been the first symptom; but while it is found alone, it is but a slender proof of an imminent consumption, even when the blood certainly flows from the lungs; and many have been unnecessarily alarmed by the appearance of what came only from their nostrils, gums, or throat.* But this, when united with other symptoms, is of great importance in determining the true seat of the distemper. The spitting of matter would at least be as certain a proof, if we had any infallible signs by which to distinguish the matter of an ulcer from the mere exudation of an inflamed membrane; but all the criteria mentioned in books are insufficient for this purpose; and I have known some attentive and very experienced physicians mistaken in their judgment upon this point. All the other symptoms of a pulmonary consumption, except bloody and purulent spitting, I have observed in one, whose mesenteric glands after death were found to be scirrrous, but whose lungs were sound. However, this happens so very seldom, that very little doubt is to be made of the diseased state of the lungs, where all the other symptoms concur, though these two should be wanting.

A shortness of breath, and a quick pulse, are the two most dangerous signs in a suspected phthisis. I have known a person die of a consumption, whose lungs upon dissection were found in a most diseased

* See chapter lxxxiv., on spitting of blood.

state, and yet during the whole illness there was no spitting of blood, no pain of the breast, nor any difficulty in lying upon either side.

A consumption is a distemper of that kind, which is most certainly derived from the parents, and yet rarely makes its appearance before puberty; between which and the age of thirty is the time of the greatest danger. Some have been attacked at forty, and have died after struggling with it four or five years. Others have been afflicted with a cough every winter for twenty years, or more, who so late in life as at the age of fifty have had all the other phthisical symptoms come on very hastily, and have died truly consumptive. The more common event of such a long cough has been to degenerate in the decline of life into an asthma. Some violent causes, such as the measles, hooping-cough, or peripneumony, may make the latent seeds of a pulmonary consumption begin to appear, or may form this distemper, even in childhood, or decrepit age, of which there have been too many examples.

The persons most subject to a pulmonary phthisis are those who are born of consumptive parents, and those in whom, during their infancy, or childhood, the mesenteric glands, or the lymphatic glands of the neck and jaw were swelled, and scirrhouſe, and especially if they have supplicated. We are too little acquainted with the animal economy to account for this disposition of these glands to swell in the earliest part of life, and that of those in the lungs to be affected in youth and manhood; while it is more usually after the meridian of life, that the glands in the breast of women and in the womb begin to be diseased, and likewise the prostate gland in men, and those of the stomach, intestines, and other abdominal viscera in both sexes. In women of consumptive habits the state of pregnancy seems to hasten the appearance of the cough, and of all the other symptoms: the distemper makes a rapid progress at this time, and yet the patients often hold out beyond expectation till they are brought to bed, and not long after.

The state of the pulse is of great importance in acquainting us with the degree of danger in a cough, which, on account of its duration, and of the bad symptoms with which it is accompanied, begins to be of a suspicious nature. A young man of eighteen, together with a cough, had a spitting of blood, a shortness of breath, vomiting, pains in the side, night sweats, and was much wasted for two years; but with these complaints his pulse was hardly quicker than it should be, and in three years he had perfectly recovered his health. Nor is this the only instance of the kind, of which I have been a witness. I impute the cure not to any medicine, but rather to the patient's constitution, which was neither scrofulous, nor derived from consumptive parents; and therefore the hurt done to his lungs by a violent cold, which he had catched, might be considered in the same light with a wound made in the lungs of a healthy man; which, though it be attended with many consumptive symptoms, yet we know by experience may be healed, and the health restored. Something of the same kind is observable in peripneumonies, from which,

after great inflammation, and cough, and spitting of blood, many have perfectly recovered.

In England we have very little apprehension of the contagious nature of consumptions; of which in other countries they are fully persuaded. I have not seen proof enough to say that the breath of a consumptive person is infectious; and yet I have seen too much appearance of it, to be sure that it is not; for I have observed several die of consumptions, in whom infection seemed to be the most probable origin of their illness, from their having been the constant companions, or bed-fellows, of consumptive persons.

Our great experience of this distemper has hitherto availed but little in enabling us to find out an effectual remedy. The cure of a disease inherited from parents, or owing to such a vitiated habit of body, as that, which is called scrofulous, has proved at least as difficult as it might have been expected, and physicians have hardly advanced further towards it, than by being able to mitigate some of the symptoms. Asses milk puts some check upon the tendency to emaciate. The dilute acid of vitriol in a decoction of bark is a very effectual remedy of the night sweats, and, as far as I have seen, is perfectly safe in all stages of this malady. A shortness of breath is no reason against using either this medicine, or an opiate at bed-time, which is the most certain soother of the cough, and saves the patient from being harassed with a restless night after a wearisome day. Where the pain of the side is violent, it will require, and is generally relieved by taking away four or five ounces of blood. If this pain be rather lingering and teasing, than violent, a small blister applied to the part rarely fails of making a cure. A diarrhoea has seldom resisted three or four drops of tinctura opii taken after every stool. No medicines need be directed for the hoarseness, swelling of the legs, or obstruction of the menstrua, which necessarily belong to the disease of the lungs and windpipe, and to the weak, exhausted state of the patient, and are no otherwise to be cured, than by curing the principal distemper. The fever and the signs of inflammation may rise so high, as to justify the losing a little blood; but frequent bleedings, though small, have appeared to injure the patient, by conspiring with the distemper to rob him of his flesh and strength.

Dissections of those who have died of pulmonary consumptions, have acquainted me, that their lungs are full of little glandular swellings, many of which are in a state of suppuration. They appear to be of the same nature as the strumous swellings in the neck, but must always be more dangerous, because the texture of the lungs disposes them to spread, and because the office of the lungs is necessary to life, so that they cannot be greatly injured without the worst effects upon the health.

Many medicines have been delivered down from former physicians, as remedies in strumous diseases; the efficacy of all which have upon trial appeared so dubious, that I cannot from experience recommend any of them as likely to correct the strumous habit, or to disperse the glandular swellings of the lungs which have not yet

suppurated, or to heal those which are already ulcered, or to prevent any more from becoming scirrhouſe. In this case therefore, as in all others where the proper remedies have not yet been discovered, the patient must be contented with instructions, which may enable him to avoid what has been found to aggravate the distemper, and by a proper regimen to put the general health into the best possible state; that the natural powers implanted in the body of readjusting any disordered part, may be able to exert themselves with the greatest vigor: nor needs the patient to despair of success from this care and attention. The breasts of women seem to be as full of glands, and of as lax a texture as the lungs; yet I have sometimes seen scirrhouſe knots in them of a very alarming appearance, which have dispersed, or become indolent, so that a final stop was put to any further mischief, merely by a proper diet and the strength of their constitution.

That something of this kind may happen in regard to the lungs is probable; for some, who in their youth have had symptoms of a consumption in great number, and in no inconsiderable degree, have recovered and reached old age without any relapse. This was the case with that very ingenious and learned physician Sir Edward Wilmot, who, as he told me, when he was a youth, was so far gone in a consumption, that the celebrated Dr. Radcliffe, whom he consulted, gave his friends no hope of his recovery: yet he lived to be above ninety years old. A youth of sixteen, after having the usual signs of a phthisis for many months, and being apparently in the last stage of it, was almost suffocated by bringing up at once a great quantity of matter, and, after a few days, the bag, in which it had probably been contained. He soon recovered his flesh and strength, became a strong man, and lived to old age, with a family of robust children and grandchildren; yet he was remarkably subject to a cough upon every slight cold, and had returns of spitting of blood several times every year.

It is common to have very bad consumptive symptoms abate, and keep quiet for a whole summer, or for a few years, and then after some severe weather, or intemperance, or catching cold, to return, and end fatally. Now, whatever has checked the distemper for a year or two, might possibly have kept it under till old age. Agreeably to this supposition, I have known an hereditary consumption at the age of twenty-nine cured after removal into a warm climate, without any relapse for twenty years; and I know not that it ever returned. An ample provision has been kindly made, sometimes by duplicates, of several parts of the body which are indispensably useful to life, that in case one of them, or some part should fail, there may still be enough remaining to answer their purpose in a tolerable manner. The lungs afford an example of this; for in bodies, which have been opened, one lobe has sometimes been almost annihilated, and so much of the other destroyed, as to make it probable, that not only life, but even tolerable health might be carried on after the strumous swellings had made great ravages in the lungs, if we had but the means of stopping the mischief here, and of effectually hinder-

ing it from going any further. This is confirmed by what is seen in pocky consumptions, from which, by means of the specific antidote, many have been restored to health after great injury done to the lungs. Hereafter we hope there may be found out as certain a remedy for the strumous virus. In the meantime the consumptive patient does not want encouragement to persevere steadily in a strict regimen, and a solicitous shunning of whatever may weaken the natural strength, or aggravate the distemper.

Cold weather, and bleak winds, will occasion coughs in the soundest lungs, and cannot be too carefully avoided, where they are morbidly tender. Warm covering, as a flannel waistcoat, will have its use; but where a removal to a warm climate is not impracticable, this will prove the most successful means. An island without any very high hills on it, and at a sufficient distance from the snowy mountains of the continent, and where the heat is from sixty to ninety degrees, is the most favourable situation; for it enjoys an equal temperature, secure from bleak winds. In the three or four summer months, the air of England is as mild as the tenderest lungs need breathe, and there can be no use in leaving this country from May until October; but for his abode during the other months, the consumptive patient should remove to such a situation as has been mentioned. The exercise which he can take with the most pleasure, and with the least fatigue, will be the most desirable.

In his diet he must abstain from all wine and spirituous liquors, and either wholly, or as much as he well can, from meat. There are some, who are very averse from vegetables, and all farinaceous food, and to such a moderate indulgence of their taste must be allowed, lest a total abstinence should weaken the patients more than the distemper: the cravings of the appetite, though not entirely to be gratified, yet are not in any illness to be wholly disregarded. The water which is used should be the purest that can be had, such as springs out of the Melvern hills, or distilled water. Those waters which are loaded with lime-stone and mineral acids, will be extremely pernicious. I have great reason to believe, that such impure waters have a strong tendency to obstruct the lymphatic glands, and make them become scirrhouſe and ulcered, even in adults, who have no hereditary strumous taint; and I think I have evidently seen such dispersed by the use of purer waters.

Sailing, so as to be out at sea for some months, has been tried by some for whom I have been consulted, and they have thought it useful. However, it has failed in others; and I can go no further in its commendation, than to say, that consumptive patients have borne it well, even those whose principal symptom was a spitting of a great quantity of blood; which complaint has not been in the least aggravated by a voyage of six weeks, notwithstanding the sea-sickness was so great, as to make the patient vomit excessively during the whole time.

A disagreeable tickling in the throat, causing a constant provocation to cough, is sometimes so importunate as to force the patient

to have recourse to various means of procuring some present relief: a few raisins will sometimes answer this purpose; for which innumerable other sweet and soft things have been employed, as a little liquorice-root tea, rob of elder, currant jelly, jelly of quince-seeds sweetened with some syrup, a mixture of oil, honey, and lemon-juice, to which, or similar compositions, it is sometimes requisite to add a small portion of syrup of white poppies. A lump of sugar moistened with a few drops of *tinctura opii camphorata* has been very serviceable. Of all which it must be remembered, that they can only afford a little temporary ease, that they do not contribute in the least to the cure of the distemper, that they pall the appetite, and therefore should be used very sparingly.

CHAPTER LXXIII.

Pictonium Colica.

THERE appear two species of this disorder, one of which may be called the acute, and the other the chronical. In the former, the pain of the stomach and bowels comes on suddenly, and is excessively great, joined with an obstinate costiveness, and sometimes with a stupor and loss of understanding, and ends in a palsy of the hands, if not in death. The chronical begins with dull pains of the bowels, not always accompanied with costiveness, which sometimes increase so as to be very tormenting, sometimes are inconsiderable, or cease; they continue in this way for half a year, for two, for three, for five, or ten years, before the hands become paralytic: at which time in both these colics there rises in several, but not in all, a swelling on the back of one or of both hands, about the beginning of the metacarpal bone of the middle finger, of the size of a small nut, without pain or change of colour. After the more violent colicky pains have ceased, and the palsy has come on, a dull pain of the stomach has remained, accompanied with flying pains all over the body, with very little appetite, if not with sickness and vomiting. The patients have continued gradually to lose their flesh (particularly in the ball of their thumb) and their strength, and not long before death have grown delirious and blind. The legs have been paralytic for a night, and I have remarked some, but not many cases, in which they too as well as the hands have been affected with a lasting palsy.

Anxiety, restlessness, and want of sleep, harass these patients almost as much as the pain; they are perpetually turning themselves in bed, and when they are able to keep out of it, they are walking to and fro all day. Muscular pains all over the body (more particularly the scapulae), extreme languor, hiccups, want of appetite, vomiting and a drawing in of the navel, are not unusual attendants upon a fit. A quiet sort of delirious talkativeness, without any fever, will continue in some for a little while after the fit has ceased. In a chronical Saturnine colic the fits have kept returning every two or three

months for several years, lasting from one week to a month or longer. In time, as the distemper becomes stronger, and the body weaker, the fits return more frequently; and even in the intervals the patients are far from being perfectly well. The pulse is less quickened in the fit, than might be expected from such exquisite anguish. When the difficulty of procuring stools is conquered, the patient finds some relief from them, and often not much. A person has been apparently dying in a fit of this colic, and in two days has been well enough to go abroad. Some of these patients have expired suddenly; and such an event may probably have been owing to the peculiar mischief which the nerves suffer from the poison of lead.

Upon opening the abdomen of one, who died of this colic, nothing preternatural could be discovered.

All the solutions and calxes of lead will certainly occasion this disease. The acute colic perhaps arises from a large quantity of this poison taken in a short time; and the chronical from very small quantities persisted in for a long time. Experience had taught mankind these singular effects of lead near two thousand years ago; and it has not yet been clearly and satisfactorily discovered that they have ever been produced by any other causes, though some have been suspected. It is remarkable, that the chronical Saturnine colic has often attacked only one person in a large family, all of which, as far as could be learned, lived in the same manner. But this must not be urged as an argument, that it could not be produced by lead; because it would prove equally against any other external cause. The very small quantity of this poisonous metal, which is sufficient to produce the peculiar symptoms, makes it extremely difficult to trace its passage into the stomach. Three grains of sugar of lead, taken every day for four days, brought on colic, costiveness, inquietude, and loss of appetite. Thirty drops of the Saturnine tincture taken every day for a month created a colica Pictonum, which was long troublesome, though cured at last. It is hard to estimate the precise quantity of lead in these thirty drops, but I judge it can hardly exceed a grain. In the tinning of copper vessels much lead has generally been mixed with the tin, and if one of the family were to use a greater quantity of what had been boiled in such vessels, especially if he were fond of acid sauces prepared in them, this would afford the ready means of accounting for that person's being singled out as the only sufferer. Dried acid fruits, or their jellies or rob, or pickles made in tinned or glazed vessels, or vinegar if it were kept any time in such, might easily be made the vehicles by which the lead was conveyed into the stomach; and the liking which some have for these, and the indifference, or aversion of others, may account for the unequal portions of lead, which may fall to the share of different persons in the same family. This poison might also lurk in some of the liquors used in the same house, and not in others; and besides, like all other nervous poisons, may have stronger effects upon peculiar constitutions. Three or four persons, who drank only white Lisbon wine from half a pint to a pint daily, have complained

of this colic, and a consequent palsy, of which I suspected the wine was the cause ; and the good effects in one of them upon leaving it off confirmed my suspicion.

The acute species of this distemper has never occurred to me, unless among plumbers, or painters, or those who had been exposed to the fumes of melted lead, the dust of old lead, or its calxes.

The unknown manner in which the lead is introduced into the stomach in the chronical colic makes probably the great, and often unconquerable difficulty of curing it. For if, from not being aware how they take this poison, they continue to take it on, no remedies can be of any avail ; and accordingly most of these cases have proved incurable. Many children probably die of this distemper (though confounded with their other bowel complaints), which they contract by having playthings painted with white or red lead, and by putting them, as they are apt to do, into their mouths. The painters of these playthings are liable to this illness ; and I have had them under cure for it.

The first attack even of the acute species of this colic has not always ended in a palsy ; and by quitting the employment which occasioned it, the cure of a very bad fit has not been succeeded by a relapse. Some active purge to procure a passage, and opium, if it be necessary, to allay the pain, and soothe the convulsions of the bowels, or a warm bath, and sometimes a blister to the belly, have proved the most successful remedies in a violent fit of the colica Pictonum. Aromatic and bitter infusions seems to be pointed out after the fit is over, as the properest means to recover the stomach and intestines from all the ill effects of the Saturnine poison, and to prevent or to cure the paralytic weakness, which so generally succeeds to repeated fits. Bath water, from its friendly effects upon debilitated stomachs, promises to be useful in this disease ; and though some have found no benefit, yet others have been much restored at Bath, and perhaps the sooner for having used those waters both inwardly and outwardly. There is a further use in a Bath journey to those who are afflicted with the chronical colic ; for by changing their manner of life, and their liquors, and culinary vessels, they may hope to cut off the communication which the lead had found to their stomachs, and against which, by being unknown, they were at a loss how to guard themselves at their own homes.

CHAPTER LXXIV.

Pituita.

An inundation of phlegm, almost to a degree of choking, especially in a morning, is to many a very afflicting complaint, and is chiefly heard of among those whose strength has begun to decline, either by the approach of age, or by the shock of some distemper.

This phlegm has been much lessened by a vomit, to the great relief of the patient ; afterwards, to keep it under, it has been found advisable to take every day half a scruple of columbo root with one

grain of long pepper, in powder or in pills; to which may be occasionally added a grain of aloes, if there be any tendency to costiveness, which would much aggravate this complaint.

CHAPTER LXXV.

Prostatæ Scirrhæ.

A SCIRRUS of the prostate gland has been observed only in adults, and chiefly those who were in the decline of life. The symptoms are, some degree of tenesmus, a pain in expelling hard feces, and a frequent irritation to make water, which comes away with pain, stretching sometimes to the extremity of the urethra, and passing up to the kidney. In the advanced state of this malady, a bloody mucus follows the urine, and the testicles swell. The ulcer has sometimes penetrated into the rectum, and wind has passed through the ulcer into the urethra, and come out with the urine.

There is a great resemblance between these symptoms and those of a stone in the bladder; and the two distempers are not always readily distinguishable. The two principal criteria are, that in a diseased prostate the pain precedes, and in the stone it follows the making of water; then, riding in a carriage, or on horseback, which so much increases the bloody water and anguish of a calculous patient, is borne in a scirrhæ of the prostate, even in its ulcered state, without any aggravation of the pain, or any more copious discharge of bloody mucus. Wherever this disorder is suspected, the assistance of a surgeon should be desired, who by an examination will seldom fail to discover the swelling, if it be considerable; but in the early state of this disorder I have known surgeons, after they have examined, differ in their opinions about the state of this gland.*

A scirrhoue prostate hardly admits of a cure. Mercurials have appeared to do mischief. A decoction of the Peruvian bark, with as much extract or powder of hemlock as can be borne without giddiness, is at least safe. An opiate clyster made of five or six ounces of water either warm or cold, and from thirty to a hundred or more drops of tinctura opii, cannot be enough commended for the important services which it is capable of doing these patients. One of them taken constantly at bed-time will always insure a tolerable night; and it may be repeated in the day, whenever the pain is excessive, with a certain effect of procuring ease. Besides these, I know no other useful instructions, which these patients can have from a physician; for their own prudence will teach them, that regular hours, temperance, and a strict abstinence from all heating food and liquors, must be rigorously observed.

CHAPTER LXXVI.

Pruritus Cutis.

THE scrotum of men, and the pudenda of women, are subject to

* See above, chapter xvi., on the stone.

be afflicted in a very tormenting manner with itching, which has continued for many years. In women this complaint is often joined with the fluor albus, and may be partly owing to the irritation of this acrimonious humour drying upon their skin for want of being duly washed off.

There is besides, an universal itching of the skin, without any eruption, or jaundice, familiar to very old men, and to those whose health is much broken with gout or palsy, harassing them both day and night, and hardly suffering them to get any sleep. Elderly men often experience likewise a slighter itching about the scapulæ.

Warm bathing has been tried with very little success. A wash of spirit of wine has allayed the itching for an hour. An infusion of white hellebore root, as directed under *cutis vitia*, has in some cases made an effectual cure. A very beneficial lotion has also been prepared from a solution of alum, from sea-water, tar-water, and a decoction of staves-acre. In some constitutions it has been judged useful to open an issue in the thigh. I know no use of any internal medicines.

CHAPTER LXXVII.

Puerperium.

BESIDE great marks of weakness, and of a shattered constitution, left by difficult labours and puerperal fevers ; and beside some diseases, as mentioned under their proper heads ; a thick miliary eruption has covered every part of the skin in a lying-in woman, without any one bad symptom, and has lasted three days. Was this entirely owing to keeping her too hot ? It has also been observed, that sometimes a little before, or a few days after the end of the first month, one of the thighs has begun to be painful, not without fever, and has swelled to an enormous size, with great hardness, and inability to extend the leg. This swelling has continued near a month, before the thigh has been reduced to its natural size, and before the use of it has been fully restored.

The paralytic, and maniacal complaints, to which the puerperal state is subject, have been sooner, and more perfectly cured, than when they have been brought on by any other causes. The puerperal fever must be treated like other similar fevers. Bleeding is proper in the beginning.

CHAPTER LXXVIII.

Purpureæ Maculæ.

SOME children, without any alteration of their health at the time, or before, or after, have had purple spots come out all over them, exactly the same as are seen in purple fevers. In some places they were no broader than a millet-seed, in others they were as broad as

the palm of the hand. In a few days they disappeared without the help of any medicines. It was remarkable, that in one of these, the slightest pressure was sufficient to extravasate the blood, and make the part appear as it usually does from a bruise.

A boy four years old, for several days had swellings rise on his knees, legs, thighs, buttocks, or scrotum. The part affected was not discoloured, and when at rest, was easy, but could not be moved without some degree of pain. Together with these swellings there appeared red spots, sometimes round, sometimes angular, a quarter or half an inch broad, which on the second day became purple, and afterwards yellow, just as it happens from a bruise. The child continued perfectly well in all other respects. These swellings ceased to appear in about ten days; but the red spots continued coming out a few days longer.

Another boy five years old, was seized with pains and swellings in various parts, and the penis in particular was so distended, though not discoloured, that he could hardly make water. He had sometimes pains in his belly, with vomiting, and at that time some streaks of blood were perceived in his stools, and the urine was tinged with blood. When the pain attacked his leg, he was unable to walk; and presently the skin of his leg was all over full of bloody points. After a truce of three or four days the swellings returned, and the bloody dots, as before. These dots became paler on the second day, and almost vanished on the third. The child struggled with this uncommon disorder for a considerable time, before he was entirely freed from it.

The first of these boys immediately grew better after being gently purged: the other took a decoction of the bark for several days without any manifest good effect.

CHAPTER LXXIX.

Rheumatismus.

THE rheumatism is a common name for many aches and pains, which have yet got no peculiar appellation, though owing to very different causes. It is besides often hard to be distinguished from some, which have a certain name and class assigned them: it being in many instances doubtful, whether the pains be gouty, or venereal, or strumous, and tending to an ulcer of the part affected.

There are two different appearances of the rheumatism, one of which may be called the acute, and the other the chronical.

The acute species is attended with great restlessness, and intolerable pain upon moving the affected joint, which likewise swells and acquires a faint blush of redness. The degree of fever, as far as is denoted by the quickness of the pulse, less injures the faculties both of body and mind, in the rheumatism, than in any other disorder; for what might be considerable enough to make others delirious, will scarcely make these patients lose their appetites, or

show much sign of distress, or of sinking under their illness. The pains and swellings, contrary to what happens in the gout, have in the first fit seized successively many different parts, seldom remaining long in any, and have continued in this manner sometimes for more than two months. These patients are subject to excessive sweats without any relief. Many of them have their pains greatly increased by the warmth of a bed: but this is not constant; for some, especially in the chronic species, are easier in bed.

The rheumatism has in more than one or two patients returned once or twice a year for several years, and upon account of this circumstance it is a borderer upon the gout, and many would doubt to which of the two distempers it properly belonged; for though one, who has had a fit of a rheumatism, may have a second or third, yet it has seldom been found to be regularly periodical in its returns; oftener indeed it has never returned at all. The rheumatism is undoubtedly nearly allied to the gout; and fits of it have been more common in children born of gouty parents; as if it were a prelude to what they were afterwards to suffer. The chronic species equally partakes of the palsy; for there is always a trembling, weakness, and numbness left for some time in the limb affected, and in the chronic sort the use has at last in many been wholly taken away. A rheumatic pain in the shoulder of a woman gradually weakened the arm, till it became almost paralytic and useless: in six or seven months the motion of the arm began to return, and after the use of Buxton water, was perfectly restored. Strumous constitutions likewise have appeared particularly liable to pains, and swellings, either rheumatic, or by every mark exactly resembling them. Such have either forerun, or accompanied strumous ulcers, and collections of matter; and strumous ophthalmies have more than once been changed into rheumatic pains of the limbs. A pain with a swelling fixed in a single part, as the knee, or wrist, without ever removing to any other, is hardly to be called rheumatic, and is more likely to be a cramp, or strain, or strumous, that is, to have a tendency to an ulcer from some internal cause. An exception however must be made in regard to the sciatica, which is of the rheumatic kind, though it be fixed in the same part: as for the lumbago, it seems to be rather a cramp, or strain.

The chronic differs from the acute rheumatism in being joined with little or no fever, in having a duller pain, and commonly no redness, but the swellings are more permanent, and the disease of much longer duration; for if the acute species have continued some months, the other has continued for many years. It oftener happens that the fits return, at no certain intervals, till they have brought on a deplorable weakness, or entirely destroyed the health. Both kinds of the rheumatism attack indiscriminately males and females, rich and poor.

The rheumatism has appeared so early as in a child only four years old, and I have seen several afflicted with it at the age of nine years: in which it differs from the gout, which I never have observed before the years of puberty.

Many of the worst rheumatisms have never offered to go beyond the external muscle and joints ; yet I have seen some, in whom the rheumatism has spontaneously passed these bounds, and attacked the stomach, or head. As in a great number of rheumatisms this has happened so seldom, it may be, that those disorders, in which the stomach and head have been affected, were more truly gouty or strumous, or belonged to the chronical rather than acute rheumatism. An immoderate vomiting, and restlessness, and entire loathing of every thing, which ended in death, occurred in the case of one man, whose complaints in many respects partook more of the nature of rheumatism, than of gout.

The rheumatism is not more like the gout in its appearance, than in the little progress which has hitherto been made in settling the proper method of cure ; which perhaps is partly owing to the different disorders, which have been called by this name. In the acute sort, bleeding has been much trusted to, which is so much dreaded in that very similar distemper the gout : and it seems to be plainly pointed out in young persons of vigorous health, who have contracted this illness by the common causes of inflammatory distempers, such as being exposed to cold air when they were heated with labour. But as much as I have been able to observe, the benefit of large and repeated bleedings is in most cases far from being clear and unquestionable. One of the worst rheumatisms, which I remember, immediately succeeded a most profuse bleeding of the nose, which continued so long as almost to exhaust the patient, and to bring his life into imminent danger. Something like this has happened in a second instance.

Among the common people, tradition has preserved the use of the *linum catharticum*, and other very strong purges ; but these have not been attended with such good effects, as to establish their general usage. Sweating is another evacuation, which has been employed both in the acute and chronic rheumatism, and sometimes, as it has seemed, with advantage ; but it is notorious, that these patients are of themselves subject to excessive sweats without any mitigation of the distemper. I have remarked some instances, in which warm bathing seemed prejudicial, but not one, in which it did any good in either species of this distemper. Cold bathing has often been useless, but at least as often serviceable. A blister has relieved the more fixed pains of the chronic rheumatism ; and the volatile and saponaceous liniments have been rubbed in upon the parts affected, and perhaps with benefit. The motion of a carriage has been so far from increasing these pains, even when they have been very bad, that some patients have been easier when travelling, than when sitting still in their chairs.

Preparations of quicksilver have been frequently given with purging medicines, and sometimes with an opiate ; but there will be cause of hesitating about making use of mercurial preparations, since they have indubitably in many cases constantly brought on fits of the rheumatism : and never could be used, though several times tried, without having this effect. The rheumatism has in some persons

been the sure attendant upon a venereal disorder, probably in consequence of the mercury which had been used for its cure.

The Peruvian bark, gum guaiaeum, the Portland powder, preparations of antimony, a mixture of nitre and volatile salt, the powder or infusion of bogbean and other bitters, are supposed to possess some specific virtue in the cure of this malady ; but all these must be looked upon as being in a state of probation only, not as being yet established in the class of efficacious remedies. Opium, notwithstanding Sydenham's objections, has at least proved a safe and effectual remedy for the purpose of mitigating the pains, and of procuring easy nights of sleep ; and has not only palliated the symptoms, but has been judged to contribute to the cure of the rheumatism, more by its calming, than by its sudorific power : nor do I know that it is more efficacious, when administered in Dover's powder, or mixed with antimony, than when given alone.

Pains of the hips are well known to arise sometimes from a morbid state of the joint, of a very different nature from the rheumatism.*

CHAPTER LXXX.

Semen Virile.

INTEMPERANCE in venereal pleasures is punished with various symptoms of weakness, generally causing a greater languor of mind, than of body, proceeding from the reflection upon that misconduct, which has done this injury to the health. In these cases the semen will come away too promptly both in sleep, and in the day-time, and sometimes without the person's having any sense of it. Cold bathing has been useful in such complaints ; but living in a more cautious manner, and abstaining from all the practises, which occasioned them, is the most effectual remedy, and what I believe will seldom fail. I have in two persons known the semen of a chocolate colour, probably owing to the breach of some small blood-vessel. This discolouring has continued for some time, but without any bad consequences.

CHAPTER LXXXI.

Singultus.

A MUCUP is the companion both of chonical and acute distempers. It has been the forerunner of epilepsies, and has attended palsies, and seldom fails to be one of the symptoms of diseased livers, and sometimes will belong to simple obstructions of the gall-ducts. Various other diseases of the stomach and bowels have this for one of the symptoms ; whether they arise from ruptures, seirrhi, and ulcers, or from mischief done by the violent operation of drastic antimonial,

* See above, chapter xxi.

or corrosive mercurial medicines. All these have been the causes of hiccups, which have lasted for months, and for years; some almost constant, and others with intervals of various lengths. One or two patients have been harassed with them for several months without any other sign of ill health.

A hiccup is a symptom of a dangerous nature in acute distempers: it has begun on the first day of a fever, and lasted for the whole seven days, that the patient lived, without yielding to any of the known helps. In other less violent, though at last mortal, fevers it has admitted of no relief for twenty days. The cure of it must either depend on the cure of the primary distemper; or it must be treated with anti-spasmodics, such as moderate doses of opium, or a spoonful of the musk julep frequently administered.

CHAPTER LXXXII.

Sitis.

AN unquenchable thirst, and, what is often joined with it, a dropsy, or diabetes, are not so much distempers themselves, as attendants upon great disorders of the abdominal bowels; which most commonly admit of no relief, but end in death. However, the primary malady, though fatal at last, will in some cases be two or three years undermining the health, before the patient sinks under it; during all which time he is harassed with this most distressing ail, which is usually accompanied with a feverishness, and loss of appetite, and strength, shortness of breath, and other signs of a ruined constitution.

Formidable as this symptom is, yet it has not always been fatal; the original distemper in a few instances having admitted, and happily met with a cure. The thirst has been increased by indulging the desire of drinking; and has been relieved by the use of a little nitre. But unless the principal disease can be put into a successful method of cure, it is plain, that this among other symptoms dependent upon it, though it may be checked, yet is not likely to be entirely subdued.

CHAPTER LXXXIII.

Spasmus.

INVOLUNTARY agitations, and cramps or involuntary contractions, in those muscles which should obey the will if much increased, are called convulsions. Every external muscle of the body is liable to spasms, as our senses inform us, and probably all the internal muscles likewise. These preternatural contractions of the muscles have sometimes burst a small blood-vessel, and the extravasated blood running under the skin has discoloured it black and blue, and yellow, as it appears when bruised.

Cramps and involuntary agitations are familiar to gouty and hysterical patients, and often forerun and attend palsies, and are the prin-

cipal symptoms of epilepsies and St. Vitus's dance. The causes of them are either in the nerves only of the part affected, or in the brain and spinal marrow. That species of cramp, called *chorda penis*, is usually occasioned by the acrimony of the venereal virus affecting those particular nerves; but it may be brought on by other similar local mischief, for I have twice known it without any venereal infection. A perpetual agitation of the left leg and arm arose from a purulent mass, into which the right side of the brain was changed, its natural texture being obliterated. Instances of a like nature with these perpetually occur, whether the irritation of the part, or the preternatural state of the brain and spinal marrow, be owing to any disease, or to some external violence.

On the sixth day after the extirpation of a scirrhouſe testicle, the patient began to complain of a difficulty of swallowing, or rather of a sudden sense of suffocation: and in two days the jaw became immoveably locked, and the patient soon died. I observed the same happen in an hysterick woman, without any sore or wound. She died about the tenth day; opium and warm bathing proving ineffectual.

After a dangerous fever the sleep of a man was sometimes broken by excessive cramps. Two or three days previous to such a bad night, there used to appear about the middle of the tibia a small soft tumour hardly bigger than a pea; and by this never-failing sign the approach of the cramp was certainly known.

In the fevers of children the face is sometimes drawn to one shoulder. I have often seen this, but never knew it continue long after the fever was cured. This happens both in continual, and in intermittent fevers. A similar circumrotation of the face, sometimes to the right, sometimes to the left shoulder, has continued for a long time in several elderly women who had no other complaint; but in them this involuntary motion has been so little violent, as to be over-powered by a very small force, and therefore has ceased while the head rested upon a pillow.

Fevers in the West Indies, as we are told, by some disturbance of the brain, give occasion to those very formidable cramps called *emprosthotonus*, and *opisthotonus*; some less derangement has been left by fevers in England, in consequence of which cramps of the legs have returned every night in a most tormenting manner. But the change made in the state of the nerves by a fever has not always in this respect been for the worse; for the only time that one person was free from spasmodic agitations was during a fever.

Sleep favours the access of cramps, as it does of all other nervous complaints; and therefore they are chiefly complained of in the night; they attack some just as they are sinking into sleep, and others just as they are waking at the usual time, or forcibly awake them in what would else have been the middle of their sleep. Acids have sometimes brought them on.

Slight cramps are cured by altering the position of the limb. *Æther* has been rubbed into the calves of the legs at bed-time with success. Habitual cramps have yielded to five drops of *tinctura thebaica* mixed

with forty drops of *tinctura asæfetidæ* taken every night. A fit of the gout has been judged to suspend the power of cramps; but I am much more strongly convinced, that the gout is apt to breed and foster them. A course of warm bathing effectually cured an obstinate cramp, which had for some months kept the body crooked, and one hand immovably clenched, so that the nails had grown into the palm, and made sores. The waters of Bath have been useful, as it is probable, more on account of their warmth, than of any other qualities. The cold bath has been tried without any benefit.

CHAPTER LXXXIV.

Sputa Cruenta.

A CONSIDERABLE spitting of blood, proceeding not from the stomach with the action of vomiting, nor trickling down from the back of the nostrils, but coming from the lungs, is a very just ground of alarm to the patient. This is very seldom seen in children: many having kept free from this, as well as from the other symptoms of a pulmonary consumption, during their childhood, though they were born of consumptive parents, and died of that disease before they were twenty. This complaint has made its first appearance at all times of life from puberty to old age.

The danger belonging to it will be greater in proportion to the greater number and degree of the other consumptive symptoms, with which it is accompanied, and to the tenderness of the age at which it comes on. A spitting of blood seems sometimes to be the whole complaint, so that not even a cough shall be joined with it, but the blood will be brought up with as little effort as the easiest phlegm: it does indeed most commonly denote an unsound state of the lungs; but from many facts it seem reasonable to infer the possibility of a slight hemorrhage from the vessels of the lungs, or trachea, while the lungs are otherwise in a healthy state, and consequently with as little danger, as from the hemorrhoidal vessels, or those of the nose, especially if it happen at the meridian of life. I have seen a man in good health at seventy, who for fifty years had never been free from spitting of blood above two years together. In others I have known it return every now and then for a long time. In a peripneumony a bloody mucus will be brought up as the patient recovers, and no cough, nor sign of any injury remain. A peripneumony, in which bloody phlegm had been spit up for two or three days, gradually abated, and the patient seemed to be recovered; but the cough soon came on again, and in a month's time there was a great wasting of the flesh, and a difficulty of breathing, with many signs of approaching death: after going into the country, and riding, the patient lost his cough and shortness of breathing, and lived healthy for many years. A very considerable wound may be made in the lungs of a healthy man, as I have known, by a bullet, without either death, or a consumption following. The loose texture of the lungs, and their

great number of large blood-vessels, together with their constant motion, and the impossibility of any topical application, might make one fear that a large hemorrhage from them could never be stopped, and must prove fatal ; yet I have known such a breach entirely cured,* as was probable, from their being no return of spitting blood for near forty years ; and I do not remember, as common as this complaint is, to have seen more than one, who was evidently exhausted by large and repeated returns of it, and might truly be said to have bled to death. A man has survived at least for two years the loss of a pint of blood from the lungs every day for a month. Not only the common motion of the lungs is borne without much increasing their hemorrhage, but a perpetual sickness and vomiting during a voyage of six weeks did not apparently make a spitting of blood more profuse.

These facts may afford some hope in accidents of this kind ; which however most frequently end in a quick consumption, or leave a lasting cough, growing worse every winter, and making the breathing more laborious. Among the notes which I have taken of these cases, I do not find that I have reason to recommend any new remedy, or that I have made any practical remarks upon those which are in common use. The necessity of keeping quiet, and cool, is evident, and therefore of avoiding all strong liquors, high sauces, hot rooms, costiveness, loud speaking, and exertions of all kinds. Two or three large spoonfuls of tincture of roses may be frequently taken with advantage ; and there will sometimes in these cases be occasion for a gentle opiate. If I give so much to the established practice as to allow of one or two small bleedings, where the spitting of blood has not already occasioned too great a loss, I must think a caution necessary against large and repeated bleedings which would probably conspire with the distemper to exhaust the patient.

CHAPTER LXXXV.

Steatomata.

Two children, the one four, the other eight years old, had tumours all over them, some of the size of small nuts, others as large as nutmegs. I judged them to be of a steatomatous kind. One of these children had a voracious appetite : they were both very weakly, and soon pined away, and died.

Softish subcutaneous tumours, between the size of a pea and that of a small nut, without any pain, have been very numerous in the arms only ; and in another they were chiefly seated about the ankles, elbows, and knees, and were suspected to be venereal. In a third, similar tumours continued six years in the arms, and then spontaneously retreated. They have lasted so long as ten years.

* In the second volume of Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, is given an account of a dissection, where a wound of the lungs had been perfectly healed. — E.

The large steatomatous swellings, or wens, are safely cut out, and they seem to admit no other cure.

CHAPTER LXXXVI.

Stranguria.

THE strangury, or a frequent and most urgent desire to make water, with excessive pain in the attempt, is sometimes an attendant upon pregnancy, and usually accompanies diseases of the womb, of the prostate gland, and of the bladder, hard feces obstructing the rectum, and injuries of the urethra from fresh, or frequent, or ill-cured gonorrhœas.

It has been caused by some sorts of food, and some medicines, as pepper, particularly long pepper, mustard-seed, horse-radish, and other acrid vegetables, and rough cider. This pain has come on from taking six drams of diuretic salts, and very certainly follows the use of spirit of turpentine, one dram of which is on this account a greater dose than can generally be borne. Cantharides are well known to possess the same power beyond all other substances, even applied externally, as well as when taken into the stomach. It is one among the many instances of our imperfect knowledge of the animal economy, that we can by no means understand how the cantharides should pass so quietly without hurting the various passages, and some of them of exquisite fineness, through which they are carried to the bladder, and yet irritate this part in that extraordinary manner, which is too often experienced from the application of blisters. The difficulty of accounting for this is increased by our finding, that one blister has sometimes occasioned this irritation, though afterwards in the same person, and the same illness, five blisters applied at once have had no such effect: and what is called a perpetual blister, after it has been kept open seven years without doing the least hurt to the bladder, has all at once, without any apparent reason, affected it so strongly, as to make it impossible to continue the blister any longer.

There are persons, who from some unknown peculiarity in their constitution, have such a disposition to the strangury, that after the application of a blister this complaint has continued upon them for several months: others, without any of the known causes, have frequently had returns of it throughout their whole lives from their infancy, particularly in every illness, whatever it were, though no blister had been applied. It is a disorder familiar to elderly persons, both men and women: and it has been suspected, that a tendency to this evil has been created by a gouty habit.

No medicines taken into the stomach have appeared to do much good in the strangury. Oil, and gum arabic, may perhaps do a little; but I have reason to believe, that camphor, like other substances of the same class, will create a dysury, rather than prove its cure. The uva ursi is at best a doubtful remedy, and yet it is capable of doing something to the parts concerned in secreting and containing the urine,

for in one patient it was frequently tried, and it always changed the urine to a green colour. Bougies have afforded great ease in difficulties of urine from venereal injuries of the urethra, but they have seldom effected a complete and lasting cure. Injections of oil into the urethra, sitting over the steam of warm water, warm fomentations of the perinæum, and about the os pubis, have often procured a truce with these pains ; but an opiate clyster made of a quarter of a pint of water, and from twenty to a hundred or more drops of *tinctura opii*, has most readily cured the strangury arising from a blister, and has been the most certain and expeditious temporary relief in those cases, which admitted nothing further.

CHAPTER LXXXVII.

Struma.

THAT habit of body is called strumous, or scrofulous, or the evil, in which the lymphatic glands are swelled with little or no pain. This happens most commonly in the neck, and armpits, more rarely in the groin. Those of the mesentery are found liable to the same disorder, and probably all the other internal lymphatic glands. Together with these appearances, the end of the nose, and both the lips are apt to swell, and the eyelids are often inflamed, and ulcered. These ailments have sometimes followed, or been joined with cutaneous eruptions, and purulent discharges from the ears. Some constitutions experience frequent returns of an inflammation of the tonsils, which lasts a few days, not without fever : in others there is an enlargement of them, which sometimes continues for a long time with considerable uneasiness to the patient, and some difficulty of swallowing.

Infants and children are particularly subject to strumous disorders, and more especially the weakly with very fair skins. After the age of puberty the tumours of the glands, and the inflammation of the eyelids, usually begin to abate, and in adults often disappear entirely ; but in some persons, upon their retreat from the outward parts of the body, they seem to fall upon the lungs, whence arise incurable consumptions. But children are not the only sufferers by this malady ; for I have noted eight or ten healthy persons, in whom the lymphatic glands began first to be enlarged after the age of thirty, and the swelling in some of them did not show itself till near their sixtieth year. The origin of this mischief in these adults was probably to be found in the unwholesomeness of their diet, or situation. The use of a very hard water was suspected to have made one of them scrofulous ; for he began to be so after using it constantly for a few years, and continued so long as he used it, but upon leaving it off, all the scrofulous appearances left him. It is most probably owing to some bad quality of the water, that swellings of the throat are endemic in some parts of England, and notoriously among the inhabitants of the Alps ; though I by no means think it owing to the use of snow-water, to

which it has been attributed : for I believe, on account of its great purity, this would be one of the best remedies they could employ.*

Beside these swelled glands, which make one species of the evil, there is another, which is called the Joint evil, which has begun in the hands, or elbows, or feet, with a small tumour situated so deep, that the bones are often affected. These have continued two or three years, before they have come to ulcers, which have been of such a malignant nature, as at length to make the hands or feet almost useless, or to make the fingers and toes fall off. Are the diseases of the head of the thigh-bone, and its socket, and also what is called the white swelling of the knee, to be referred to this class? This seems not unlikely, as they have been found joined in the same person with the usual marks of an inveterate scrofula.

Some strumous appearances have shown themselves not long after the measles and small-pox, and this has created a suspicion, that this alteration of the health was to be attributed to some relics of those diseases : but this has happened too seldom within my observation to give any just grounds for such an opinion, which perhaps has been entertained the more readily, because the patients, or their friends, were unwilling to think the scrofulous complaints hereditary, or constitutional.

The scrofula, and lues venerea, when they meet, seem greatly to exalt the malignity of each other.

The swellings of the lymphatic glands in the neck, and armpits, have continued above twenty years without any other variation, than being a little enlarged upon catching cold : but this is extraordinary, and happens but seldom : they more usually either lessen by degrees, and vanish in not many months, or in a very few years ; or else inflame, and suppurate. The larger break into smaller parts with a slight degree of itching in the skin previously to their going away ; and the smaller first grow softer, and so gradually sink down, and are reduced to their natural size ; instances of all which are very common. When, instead of dispersing, these tumours inflame and grow red, they are a long time in coming to a sore, in which state they are slowly dissolved into an imperfect pus, and afterwards heal. These sores have never within my observation shown a disposition to turn cancerous in children, and only in two or three adults.

I never saw any occasion for using poultices, plasters, or warm coverings to strumous swellings. They cannot be wanted to mitigate the pain, because it is so inconsiderable ; and if it be meant to disperse them by plasters, it may be doubted whether any have a power of this kind ; but if the application be intended to make them

* The inhabitants of Rheims had been so afflicted with strumous diseases, that they maintained an hospital for the sole purpose of curing such patients. They then made use of no other water than what they had from wells. After a machine was constructed, which brought the water from a neighbouring river, and distributed it into all quarters of the city, it was observed that serofulous disorders became less common ; and in the space of thirty years the number of these patients was reduced to one half of what it had usually been : it continued to decrease so fast, as to give occasion for thinking, that the greater part of the revenues of the hospital might be applied to other purposes. — *Soc. Royale de Médecine*, vol. ii., *Hist.*, p. 280.

suppurate, it is doing that, which too much pains can never be taken to prevent ; for they cannot terminate in a worse manner. If this event cannot be hindered, and the glands spontaneously tend to become ulcerous, they should be suffered to break of themselves without the help of a knife or a caustic ; and the mildest defensative plaster is all the further care which they require. The scrofulous inflammations of the eyelids, and eyes, sometimes make bleeding necessary ; and they have been much more benefited by leeches, than by taking away blood in any other manner : two or three may be put to each temple once or twice a week for a considerable time. Many external applications to the eyes are recommended, all which have been often found of very little service, except soft cataplasms put between two pieces of fine linen, and so applied to the eyes, and touching the edges of the sore eyelids every night with some softened animal fat, which will hinder their being glued together in the night ; for the force used to open them in a morning keeps them constantly raw and sore.

Mercurial medicines have been judged to hurt, rather than to help scrofulous patients ; and perhaps strumous distempers have been aggravated by the accession of a venereal infection, chiefly on account of the preparations of mercury which these require. Seawater, internally and externally, extract of hemlock, bark infused in purging waters, or taken in substance at night, while purging waters, or salts, are used in the morning, burnt sponges, sal soda, issues, and perpetual blisters, are the principal means which have been recommended as alteratives of a strumous habit ; all which, as experience has taught, may be employed with safety ; but the reputation of their efficacy is far from being fully established. Where the patient has not perseverance enough to continue the use of any of these for a proper length of time, he may do himself some, and I believe considerable service, by a temperate course of life, and by drinking no other water than such a pure one as that of Malvern.

CHAPTER LXXXVIII.

Tenesmus.

A CONSTANT needing, or wanting to go to stool, though little or no feces could be voided, has been owing to the following causes - hard feces, which had loaded the rectum, and which could not be expelled without assistance ; a scirrhus of the womb, of the rectum, or of the prostate gland ; a stone in the bladder ; a strangury, particularly one brought on by cantharides ; and a weakness of the sphincter ani left by an apoplexy, or a difficult labour. It is usually troublesome for a little while after a dysentery ; and has accompanied the colica Saturnina, and a prolapsus of the inner coat of the intestine.

A tenesmus is usually increased by standing or walking, and relieved by sitting. When it is merely owing to acrimony, an opiate

elyster will be the best remedy. In other cases the relief of this uneasy sensation must depend upon the cure of the original disease, of which it is a symptom.

CHAPTER LXXXIX.

Testiculus.

BESIDES tumours of the testicles from external, or venereal injuries, they have been found joined with an intermittent fever, coming on and going off with every fit, and finally ceased upon the cure of the intermittent: this has happened more than once. A common cold has had a similar effect upon several persons. A scirrhoue prostate gland has made the testicles swell; which also is no very uncommon consequence of stones, and other affections of the kidneys. Without any manifest cause a swelling has begun in one of the testicles, and after continuing a few months has spontaneously subsided. A tumour of them has at other times slowly increased for many years, and at last made the whole testicle scirrhoue, which has been twenty years before it became cancerous and fatal. A fistulous sore has formed in such a testicle, and has long harassed the patient.

Purges, except very gentle ones, have been at least useless. Poultices are necessary when the pain is considerable. Whether there be pain or swelling, a bag-truss is of indispensable use to suspend the scrotum. There is no cure for a scirrhoue testicle, but castration; and this may be safely performed, if the spermatic cord be in tolerable order; but where this too is diseased, the case admits of no cure. The hydrocele is inconvenient, but void of danger; and may be sufficiently relieved, without pain or hazard, by tapping, as often as there is occasion. An operation is sometimes performed in the hydrocele, which makes a lasting cure.

CHAPTER XC.

Torpor.

A NUMBNESS, or sense of tingling in a limb, which is commonly called its being asleep, has been experienced in every part of the body, but chiefly in the limbs, and particularly the extremities. It is a half loss of the sense of feeling, and is extremely common, though a total loss of it be so rare even in the most hopeless palsies.

A numbness, like a cramp, has been either a slight complaint brought on by an inconvenient posture, or other trivial causes, unattended with any ill consequences, and presently removed; or else it has arisen from that preternatural state of the nerves, which is inconsistent with tolerable health, or, it may be, with life, and has been the forerunner of convulsions, palsies, and apoplexies. The old seem most subject to it, and both sexes equally; in youth, females have

oftener been sufferers than males. Where a torpid state of any part has not been constant, it has been found to come on chiefly in the night, owing partly to a long continuance of the same posture, and partly to sleep, which favours the access of all disorders in which the nerves are more immediately concerned.

Numbnesses are familiar to broken constitutions, and such as have been derived from paralytic parents. They have been the forerunners, the attendants, and followers of palsies, and apoplexies, and are commonly joined with other symptoms of these maladies. This very frequently makes one of the numerous complaints, which are heard of among hypochondriac and hysterical patients, and has continued in them and others not only for many months, but often for many years, and then has gone off without having done any mischief to the health. The whole left side has been benumbed for five-and-twenty years.

The true nature and tendency of a numbness may be best known by its attendant circumstances; for if it be associated with other paralytic symptoms, and affect a considerable part of the body, especially in persons derived from paralytic parents, no doubt can be made of its betokening mischief, and the proper preventives of palsies should be employed. But if a torpor should affect only a small part, as one or two fingers, or toes, and be united with no other symptoms, or only such as are common in hypochondriac disorders, the less notice the patient takes of it, the happier he will be. But if there should be reasons for endeavouring to cure this more innocent species of the complaint, blisters, and warm bathing, have been found the most serviceable means; cold bathing, and bleeding, have been found prejudicial; the gout has been useless; and as for electricity, its virtues have not yet been sufficiently ascertained.

CHAPTER XCI.

Tremor.

A TREMBLING of the hands, or a shaking of the head, may be judged to have some alliance with paralytic and apoplectic maladies; yet it has been found by experience, that such a tremor has often continued for a great part of a person's life, without any appearance of further mischief; and therefore, if it have a tendency to palsies, it is a very remote one, and the inconvenience is far more considerable than the danger. Hypochondriac persons are troubled with frequent fits of it; hard drinkers have it continually; and some degrees of it usually attend old age.

This, like other affections of the nerves, is greatest in a morning, and is aggravated by any disturbance of mind. Coffee and tea make the hands of some persons shake; and yet I have known strong coffee drunk every day for forty years, by one who was remarkable for the steadiness of his hands even in extreme old age. There are many others, who know no such ill effect from these liquors; and indeed,

if it were general, few Chinese, and Turks, would escape it; but their history does not acquaint us, that these people are more subject to tremors, than those of other nations.

If any medicines are wanted, they must be such as are found serviceable in paralytic and hypochondriac complaints.

CHAPTER XCII.

Tussis.

A COUGH seems to have been sometimes occasioned either by an acrimonious, or a too copious defluxion on the trachea, without any material, or permanent injury of the lungs; or merely by disorders of the stomach and bowels, as hath appeared upon dissections, examples of which are often seen in children with worms, and swelled mesenteric glands. In cases where the lungs themselves have been diseased, it is observable that they are sometimes in a disposition to let the mischief spread in a rapid manner all over them, and in a very short time become a fatal consumption; while in other instances the injured part of the lungs has seemed to remain in the same state for twenty, forty, or even sixty years, with very little inconvenience beside the cough, so that the patient has grown fat with it; or else the disease of the lungs has spread so slowly, that though the cough has become a little worse every winter from youth to old age, yet it has not been till towards the end of a long life, that the lungs have become so diseased, as to do their duty with that difficulty, which is called an asthma. Even an ulcer of the lungs, as was adjudged from the blood and purulent liquor spit up, has for a considerable time kept itself confined within the same bounds. In a few cases the ulcer has probably been seated in a capsula, which has at last been coughed up with great efforts, and some danger of suffocation; after which there has been a total cessation of all the complaints, the sore being in all probability entirely healed. In hysterick, and convulsive diseases, arising from some disordered state of the whole system of nerves, those serving to respiration have among the rest been disturbed so as to occasion violent coughs, without any more injury to the lungs, than the convulsions of the limbs, or body, occasion in those parts, which they have seized. These coughs, and those arising from defluxions upon the lungs, are attended sometimes with an unusual noise, and are generally much stronger, than consumptive coughs are, not only in their beginning, but even in their advanced state. The same is likewise the case with those coughs, which are owing to some hard body fallen into the trachea. I have seen a violent, and almost perpetual cough, arising from a bone fixed in the windpipe, which had lasted some months with an unusual sound, and presently ceased upon coughing up the bone.

Coughs have molested some persons alternately with ophthalmies, the gout, scald head, and other cutaneous disorders. It must be remembered, that in all long coughs there is danger of a consump-

tion, and therefore a cool regimen is of indispensable use, in order to keep the lungs in that state, which is most likely to hinder the sound parts from being infected by the diseased. There have been too many examples of coughs remaining in a tolerable state for twenty years, and which with proper care might have remained so for twenty more, which have by mismanagement, or catching cold, been joined by all the symptoms of a quick consumption, soon after terminating in death. Hence arises a difficulty of deciding, whether a cough be a consumptive one: most coughs naturally tend to a pulmonary phthisis; and though the tendency be sometimes so strong, that there is no hazard of being mistaken in pronouncing the cough consumptive, yet in many instances no physician can prognosticate the event, unless he be able to predict also what the patient's manner of living will be, and whether he will always escape violent colds, and peripneumonies.

Abstemiousness, change of air, and a judicious use both of bleeding and of opium, have proved the best means of soothing a troublesome cough, and of hindering it from becoming a dangerous one.

CHAPTER XCIII.

Tussis convulsiva.

THE hooping-cough is most common among children, and is undoubtedly contagious; it is a tedious disorder, lasting often for several months; and though sometimes slight, yet in some children it proves fatal. An inundation of phlegm, or a vomiting, the clearness of the intervals, and the violence of the fits, may generally distinguish it from a common cough in the very beginning; but afterwards it cannot be mistaken, when the expiration in coughing continues so long, that they can hardly recover the power of drawing in their breath, which is done at last with a peculiar sound, called hooping; and this principally characterizes this distemper. A child has had one of these coughs three months before the hooping came on. The violence of the cough sometimes makes the nose bleed, and the face blackish, and has strained the eyes so as to do them a lasting injury. It does not usually attack a person more than once; but to this I have heard some few exceptions among those whom I have attended in it, of whom more than one have assured me they had been ill of it before.

Old persons are less liable to this malady, but by no means exempt from it: I have seen it in a woman of seventy, and in a man of fourscore. A child has some notice of the approach of a fit, so as to be able to run to his nurse, or mother, before it begins; but adults are, as it were, overpowered at once upon the access of the fit, so that they fall down instantly, as in an apoplexy, but very soon come to themselves: this is a distinguishing symptom of the disease in those who are grown up; and if they have not before been subject to a cough, and have lately been in the way of catch-

ing this distemper, the circumstance of their falling down in this manner may take away all doubt about the nature of their illness. Flatulence in an extraordinary degree often accompanies this cough.

Experience has instructed us, that a change of air is of singular use in abating the force, and shortening the stay of this distemper. The stomach is so much disordered in it by being overloaded with phlegm and oppressed with wind, that it seems very reasonable to relieve and strengthen this part by the help of rhubarb and bitters. The hooping-cough has so much the nature of a convulsion, that a prudent use of opium, together with musk, lac ammoniaci, and vinum antimonii, might probably be beneficial ; but I have not seen such undoubted success from these medicines, as to be confident of their virtues. As for the numberless specifics, which are every where to be met with, I have nothing to say in their favour from my own observation.

CHAPTER XCIV.

Valetudo conquassata.

A DANGEROUS disease, or great decay of the parts necessary to life, occasions what is called a broken state of health ; by which is meant an assemblage of many or most of the following complaints : A paleness, or sallowness of the countenance ; a bloated face ; thirst ; shortness of breath ; palpitation of the heart ; flatulence ; loathing of food ; sickness ; frequent making of water ; incontinence of the stools, and of the urine ; swelling of the legs ; wandering pains ; spasms ; wasting of the flesh ; weakness ; lassitude ; itching of the skin ; tremblings ; numbesses ; feverishness ; languor ; faintings ; sleepiness in the day-time ; want of sleep at night ; forgetfulness.

CHAPTER XCV.

Variolæ.

THE experience which I have had of inoculation, does not enable me to add any thing to what has been already established in relation to its utility, or the management of the inoculated. I am sorry to have found, that this operation has not always secured the patient from having the small-pox afterwards, if the eruption have been imperfect without maturation. I attended one in a very full small-pox, which ran through all its stages in the usual manner ; yet this person had been inoculated ten years before, and on the fifth day after inoculation began to be feverish with a headache, followed by a slight eruption, which eruption soon went off without coming to suppuration ; the place of inoculation had inflamed, and remained open ten days, leaving a deep scar, which I saw.

By some accident, most of the notes are lost, which had been made during my attendance on a great number of patients in the un-

inoculated small-pox ; therefore I shall not attempt to give a full history of this distemper, but confine myself to the relating of such observations as are justified by the few remaining papers.

Many instances have occurred to me, which show that one who has never had the small-pox, may safely associate, and even lie in the same bed with a variolous patient, for the two or three first days of the eruption, without any danger of receiving the infection. One woman continued to suckle her infant for two days after the small-pox had begun to appear upon her ; and the child being then removed escaped the distemper for that time, but was unquestionably capable of being infected, because he catched it about a year and a half after.

Parents have several times judged it proper, when one of their children has fallen ill of the small-pox, not to send those away, who had not had this distemper, but to let them all continue together in the same house, and often in the same chamber. About the sixth day after the distemper had arrived at its height in the sick child, the others have for the most part begun to complain ; and therefore it is probable that this is the time, when the distemper begins to be communicable ; the infection lying dormant about the same number of days, that it does in those who have been inoculated. But there are much greater varieties in this way of taking the small-pox, than by inoculation, accordingly as persons go more or less into the way of receiving the breath of the sick person, or of touching things daubed with the variolous matter. Two children were constantly kept in the sick chamber, and yet did not fall ill till a month after ; and there are not a few examples of persons, who have seemed to be equally exposed to the infection, and yet have received it at different times.

An excruciating pain in the loins has never failed to be succeeded by a bad small-pox, and the more violent the pain the greater has been the danger ; it is much safer to have it between the shoulders ; but it is safest to have none in any part of the back.

Excessive vomiting for the whole time before the eruption is seldom followed by a mild disease ; and if the vomiting be continued after the eruption is completed, the patient's life is in great danger, even though the small-pox be not confluent, as I have seen more than once.

It is very common to have convulsions precede a mild small-pox in children, and the same has been known in some adults with as prosperous an event.

The variolous infection does some force to the vessels, which supply the menstrual discharge in women ; and in the worst sort of small-pox this evacuation has come on out of its regular course two days before the small-pox has begun to show itself, and has continued to flow in an excessive manner. It has sometimes appeared before its regular time, together with the eruption. But what I have more usually observed, is, that this uterine flux in almost all female patients has begun as soon as the eruption was completed, and it has continued

from one day to five. This discharge, though sometimes much greater than the natural one, does not seem to check the progress of the small-pox, nor to sink the patient's strength, and therefore very little pains need be taken to stop it, even though we had any ready and innocent way of doing it.

That very formidable symptom, bloody urine, has come on about the fifth day from the first sickness; the eruption in the meantime has hardly risen above the skin, chiefly showing itself in purple spots and blotches, and resembling variolous pimples only in very few places. The stools are likewise bloody; the very tears have been like lotura carnium; and if a small scratch has any where been made in the skin, the blood has for many hours continued to ooze out, and has hardly been stopped. This hopeless state has been terminated by death in three or four days after the eruption; nor have I remarked one exception. But the urine may be discoloured in the small-pox, and have a hue as dark as coffee, even where there is no reason to suspect its proceeding from gravel, and yet afford no ground for alarm, if not joined with other bad symptoms. In a middling sort of small-pox, the urine became black on the fourth day of the eruption, and continued so for four days. In another, the same black urine began on the second day of the sickness, having a sediment like coffee-grounds for two days. Both these patients went on prosperously without any other bad or unusual symptom. The pustules have sometimes shown themselves not very different from their general appearance in a middling sort, but the interstices have been filled with small round purple spots, and the distemper has been fatal on the third day of the eruption.

It has been remarked above, that the variolous virus has a peculiar effect in exciting the uterine flux, and upon this property of it perhaps depends its well-known effect upon pregnant women, who usually miscarry on the seventh or eighth day from the first eruption, and in a day or two after die. The fœtus of this abortion I have often examined with great attention. The skin of it has been much discoloured, in some parts of a dirty red, in others blackish, and in a few places of a natural colour; but I could never see any appearance of a variolous eruption. I have known a very few pregnant women, who have gone through this distemper without miscarrying, and have afterwards been brought to bed at the natural time; but I could never see upon these children any such marks as might be left by a variolous eruption; and I am well assured, that such children have afterwards had the small-pox. A young girl was opened, who died full of the small-pox, and I observed that none of the bowels or internal parts showed the least marks of their having any variolous pustules: now the fœtus in utero seems to be so much in the same state with the bowels, that if these are never the seat of the pustules, it is hardly to be expected that any should be found upon the fœtus.

A great shortness of breath coming on about the fifth day of the eruption, scarcely leaves any hopes that the patient will survive the distemper, the difficulty of breathing is sometimes so great, as not to

suffer the patient to lie down, or to have breath sufficient for speaking a common sentence.

A sudden sinking of the swelling in the face, so that the eyes can be opened ; an abrupt stoppage of the spitting ; a frequent wanting to make water, and making very little at a time ; a total absence of all fetor ; and great shiverings ; though they be very dangerous signs, yet have been seen without proving fatal.

Watery bladders, full of a yellow serum, like those raised by blistering plasters, rise up among the pustules in some kinds of the small-pox, and may show an irregularity and malignity ; but such patients have recovered.

In the decline of the distemper, when most of the scabs had fallen off, I have twice seen a few pimples with watery heads, without any redness or inflammation, which afterwards matured and resembled the true small-pox. These pustules were only in the soles of the feet and palms of the hands. In one child the pox were large, and few, for four days, and then there was an eruption of very small and numerous pustules, from which the child with difficulty escaped. In another there were a few pox, and the child notwithstanding was very restless and oppressed ; after these were dried, others broke out, and came to maturation ; and even afterwards one or two made their appearance. The child died, though all the pox, if they had appeared, were so few, that I never saw any other person die, who had not more. These are the only instances, which have occurred to me something like, what is often talked of, a second crop.

It has happened to three variolous patients in the decline of their distemper, when they were thinking of having a little meat allowed, and of taking, as usual, some purging medicine, that they have suddenly become gloomy and suspicious, and in forty-eight hours have died raving mad.

An excessive spitting, which proves so beneficial in the confluent small-pox, has in a few persons continued for several days after the decline of the distemper, in a degree equal to a common salivation, and no harm has ensued.

The milk of a woman, who suckled a child, began to lessen at the height of the small-pox, and soon after went quite away ; but after a few days it returned as plentifully as ever.

In all distempers, it is considered as a favourable circumstance, that the person is free from all other complaints, with a constitution naturally good, and unimpaired : for when there is nothing to divert the powers of life from opposing the present illness with their whole force, a happy event may reasonably be expected : and yet a complication of the small-pox with other formidable maladies, has in several instances not exalted its malignity, or produced a bad sort, nor disabled the patient from struggling through it in the usual manner. Venereal distempers have often been joined by a mild small-pox ; and in a worse sort they have not at all added to the usual danger or sufferings of the patient. Others have catched the small-pox when they were dying of scrofulous consumptions ; but have still had all the necessary

strength to recover unhurt from the new distemper, and they have not appeared to die a day the sooner of their old one.

In a large town, at a time when agues were epidemical, it chanced that the small-pox was brought in, and many caught it before they were cured of their agues. It was observable, that the ague stopped spontaneously in these patients, as soon as the small-pox fever began, and constantly returned after the small-pox was over and one or two purges had been taken. The two distempers seemed to have no other influence over one another.

Mankind has hitherto been blessed with specifics for very few distempers. The small-pox is one among many others, the proper remedy for which, if there be one, is left to be found out by the sagacity, or good fortune, of future physicians. Sanguine expectations have been entertained of the great service which the Peruvian bark, and the preparations of antimony, and of mercury, would do in opposing the variolous virus. But such hopes have upon trial all dwindled away, and left us just where we were. The method therefore of treating the small-pox will not differ from that which is contained in the general doctrine of the regimen and diet of the sick: and the troublesome symptoms which may arise, must be relieved, and the functions of life kept as much as possible in their natural state, by the same means which are used in any other fever. Costiveness in particular is as hurtful in the variolous fever, as in any other: which I mention, because the contrary opinion formerly prevailed, and is hardly yet quite worn out.

CHAPTER XCVI.

Variolæ Pusillæ. The Chicken-Pox.

THE chicken-pox and swine-pox differ, I believe, only in name: they occasion so little danger or trouble to the patients, that physicians are seldom sent for to them, and have therefore very few opportunities of seeing this distemper. Hence it happens that the name of it is met with in very few books, and hardly any pretend to say a word of its history.

But though it be so insignificant an illness, that an acquaintance with it is not of much use for its own sake, yet it is of importance on account of the small-pox, with which it may otherwise be confounded, and so deceive the persons, who have had it, into a false security, which may prevent them either from keeping out of the way of the small-pox, or from being inoculated. For this reason I have judged it might be useful to contribute, what I have learned from experience, towards its description.

These pocks break out in many without any illness or previous sign: in others they are preceded by a little degree of chillness, lassitude, cough, broken sleep, wandering pains, loss of appetite, and feverishness for three days.

In some patients I have observed them to make their first appear-

ance on the back, but this perhaps is not constant. Most of them are of the common size of the small-pox, but some are less. I never saw them confluent ; nor very numerous. The greatest number, which I ever observed, was about twelve in the face, and two hundred over the rest of the body.

On the first day of the eruption they are reddish. On the second day there is at the top of most of them a very small bladder, about the size of a millet-seed. This is sometimes full of a watery and colourless, sometimes of a yellowish liquor, contained between the cuticle and skin. On the second, or, at the farthest, on the third day from the beginning of the eruption, as many of these pocks, as are not broken, seem arrived at their full maturity ; and those which are fullest of that yellow liquor, very much resemble what the genuine small-pox are on the fifth or sixth day, especially where there happens to be a larger space than ordinary occupied by the extravasated serum. It happens to most of them, either on the first day that this little bladder arises, or on the day after, that its tender cuticle is burst by the accidental rubbing of the clothes, or by the patient's hands to allay the itching which attends this eruption. A thin scab is then formed at the top of the pock, and the swelling of the other part abates, without its ever being turned into pus, as it is in the small-pox. Some few escape being burst ; and the little drop of liquor contained in the vesicle at the top of them grows yellow and thick, and dries into a scab. On the fifth day of the eruption they are almost all dried and covered with a slight crust. The inflammation of these pocks is very small, and the contents of them do not seem to be owing to suppuration, as in the small-pox, but rather to what is extravasated immediately under the cuticle by the serous vessels of the skin, as in a common blister. No wonder therefore that this liquor appears so soon as on the second day, and that upon the cuticle being broken it is presently succeeded by a slight scab : hence too, as the true skin is so little affected, no mark or scar is likely to be left, unless in one or two pocks, where, either by being accidentally much fretted, or by some extraordinary sharpness of the contents, a little ulcer is formed in the skin.

The patients scarce suffer any thing throughout the whole progress of this illness, except some languidness of strength and spirits and appetite, all which may probably be owing to the confining of themselves to their chamber. I saw two children ill of the chicken-pox, whose mother chose to be with them, though she had never had this illness. Upon the eighth or ninth day after the pocks were at their height in the children, the mother fell ill of this distemper then beginning to show itself. In this instance the infection lay in the body much about the same time that it is known to do in the small-pox.

Remedies are not likely to be much wanted in a disease attended with hardly any inconvenience, and which in so short a time is certainly cured of itself.

The principal marks, by which the chicken-pox may be distinguished from the small-pox are,

1. The appearance on the second or third day from the eruption of that vesicle full of serum upon the top of the pock.
2. The crust which covers the pocks on the fifth day ; at which time those of the small-pox are not at the height of their suppuration.

Foreign medical writers hardly ever mention the name of this distemper ; and the writers of our own country scarce mention any thing more of it, than in name. Morton speaks of it as if he supposed it to be a very mild genuine small-pox. But these two distempers are surely totally different from one another, not only on account of their different appearances above mentioned, but because those, who have had the small-pox, are capable of being infected with the chicken-pox ; but those, who have once had the chicken-pox, are not capable of having it again, though to such, as have never had this distemper, it seems as infectious as the small-pox. I wetted a thread in the most concocted pus-like liquor of the chicken-pox, which I could find ; and after making a slight incision, it was confined upon the arm of one who had formerly had it ; the little wound healed up immediately, and showed no signs of an infection. From the great similitude between the two distempers, it is probable, that, instead of the small-pox, some persons have been inoculated from the chicken-pox, and that the distemper which has succeeded, has been mistaken for the small-pox by hasty and unexperienced observers.

There is sometimes seen an eruption, concerning which I have been in doubt, whether it be one of the many unnoticed cutaneous diseases, or only, as I am rather inclined to believe, a more malignant sort of chicken-pox.

This disorder is preceded for three or four days by all the symptoms which forerun the chicken-pox, but in a much higher degree. On the fourth or fifth day the eruption appears, with very little abatement of the fever ; the pains likewise of the limbs and back still continue, to which are joined pains of the gums. The pocks are redder than the chicken pocks, and spread wider, and hardly rise so high, at least not in proportion to their size. Instead of one little head or vesicle of a serous matter, these have from four to ten or twelve. They go off just like the chicken-pox, and are distinguishable from the small-pox by the same marks ; besides which the continuance of the pains and fever after the eruption, and the degree of both these, though there be not above twenty pocks, are, as far as I have seen, what never happens in the small-pox.

Many foreigners seem so little to have attended to the peculiar characteristics of the small-pox, particularly the length of time, which it requires to its full maturation, that we may the less wonder at the prevailing opinion among them, that the same person is liable to have it several times. Petrus Borellus* records the case of a woman, who had this distemper seven times, and catching it again died of it the eighth time. It would be no extravagant assertion to say, that here in England not above one in ten thousand patients is pretended to have had it twice ; and wherever it is pretended, it will always be as likely that the persons about the patient were mistaken, and sup-

* Hist. and Obs. Rar. Med. Phys., centur. iii., obs. 10.

posed that to be the small-pox, which was an eruption of a different nature, as that there was such an extraordinary exception to what we are sure is so general a law.

CHAPTER XCVII.

Ventriculi Morbi.

ONE among the many disorders of the stomach is a disagreeable sense of acidity rising from it, which is accompanied often with pain, or a sort of anxiety worse than pain, sickness and vomiting, a sense of weight, voraciousness in some, and loss of appetite in others, flatulence, and distension of the stomach, headache, great quantities of phlegm, and a waking out of sleep with some degree of terror.

If we were to reason upon chemical principles, nothing seems more practicable, than to neutralize, and subdue an acid, to which we can immediately add whatever we think proper ; but the animating principle makes so much difference between a living stomach and an inanimate vessel, that this, which appears easy in theory, has been found very difficult in practice ; and persons have been teased with this complaint for twenty years, without being able to find a cure. Lime water, magnesia, testaceous powders in the quantity of an ounce every day, and alkaline salts, have in several instances been tried in vain.

Milk, vegetables, fish, fat of any kind, a full meal, especially with any exercise soon after it, have generally disagreed with stomachs disposed to acidities, which they have much increased. Acids themselves have not always been hurtful, but have sometimes proved a relief. Emetics and Bath waters have succeeded with some, and failed with others. Large quantities of testaceous powders, and rhubarb, have been the most generally useful ; and a costive habit of body has been always prejudicial. After trying a variety of means for many years upon the most unconquerably acid stomach which I ever knew, the method, in which the patient settled, and which alone was able to keep the complaint in tolerable order, was the taking one ounce of testaceous powders every morning, and drinking a gallon of warm water, as an emetic, every night ; which course, with a little rhubarb occasionally, was pursued for several years.

The heartburn is an usual companion of acidities in the stomach, differing very little from them, either in its causes, or cure, and has been as obstinate in resisting all sorts of medicines. It has been attended with hiccups, eructations, and an immoderate flow of saliva. During pregnancy it is apt to be uncommonly troublesome, and is often added to the evils of the gout, and sometimes to those of the jaundice. A disposition to it seems to be borne with some persons, who have been teased with this uneasy sensation for the greatest part of their lives. Cutaneous eruptions, and the heartburn, have alternately harassed some persons. One woman, while she was

breeding, could find no relief for a violent heartburn from any of the usual remedies, and was at last cured by elixir of vitriol.

§ 2. *Ventriculi Dolor.*

Inflammations, or cancerous scirrhi of the liver, spleen, and pancreas, with all other kinds of pains between the breast and the navel, are usually referred to the stomach; and beside the disorders, which properly belong to it, and have their origin there, it sympathises with all parts of the body in many of their ailments. The gout, and perhaps the rheumatism, wandering pains, and those that are fixed, all sores and cutaneous diseases, have frequently either deserted their first seats and fallen upon the stomach, or else have drawn it to suffer together with the parts first affected. With regard to giddiness, and headaches, though they be sometimes the causes, yet they seem oftener the effects of stomach disorders. The diseases of the womb injure the stomach in a very remarkable manner; and it rarely escapes without pain, or sickness, whenever any of the various irregularities of the menstrua are complained of. It is equally a sufferer in hysterical and hypochondriac maladies, in all great perturbations of mind, and in worms, even those which are generally found only in the great intestines.

Where there is no reason to suspect and provide against any of these causes, and where the pain does not proceed from any poison, or improper food; if it be very excessive by fits with intervals, especially very long ones, of perfect ease and blameless health, there we have the greatest reason to believe it owing to gall-stones. I have noted a very considerable number of persons, who for many years (some not less than twenty) had been subject to returns of pains in what is called the pit of the stomach, and at last the appearance of the jaundice clearly pointed out their origin, or the voiding of a gall-stone has entirely removed them. In others, after a fit of the jaundice, the same pain which preceded it, and had given the patients too much reason not to mistake it, has continued to torment them at irregular times, sometimes without a yellowness, and sometimes with, for at least twelve years. Some have been subject for a great part of their lives to a moderate or dull pain in the side, or about the stomach, which, as I judged from the appearances after death, upon their being opened, was most probably owing to some gentler movements of a gall-stone.

The great varieties of pains attributed to the stomach, and the different causes of those which truly belong to it, will account for the variety of their concomitant symptoms, and the different events of similar treatments.

Bath, wine, hot medicines, a full stomach, a vegetable diet, cathartics, emetics, the state of pregnancy, a fit of the gout, acids, worm medicines, blisters to the region of the stomach; all these have in many instances been found to do good, to do harm, and to do nothing at all. After due attention has been used to discover the true nature of the pain, if there be reason to think that its origin is in

the stomach, and that it does not proceed from any inflammatory or scirrhous affection, an emetic is generally useful at first, and afterwards the method of cure, which has often succeeded, is either the drinking of Bath water, or a daily use of some of the bitter and aromatic simples, joined with as much rhubarb, or aloes, as may be necessary to keep off all tendency to costiveness. A tea-spoonful of some aromatic tincture has likewise been taken with great advantage in a little water immediately after dinner.

A great variety of such medicines is to be found in all pharmacopœias, out of which such may be chosen as will suit most stomachs, and hardly offend any palates. They are of frequent and very important use in the practice of physic, not only because the disorders of this part are far more common than those of any other, but because in unknown distempers, or in those where there is no good to be done by evacuations, and for which we have no specifics, we can only aim at putting the general health into the best state possible, the principal means of doing which will be to strengthen the stomach.

§ 3. *Morbi Lienis.*

A man in his fiftieth year began to lose his flesh and strength with some degree of fever. He sometimes felt slight shiverings, and sometimes very strong ones, returning irregularly during the whole illness. His appetite was lost, but he had no vomiting. The stools were regular till the two last months of his life. The urine was in a natural state. The pulse was very rarely too quick. There was no tension of the belly. In the second month of his illness he had an excessive pain in his stomach. Pains of the loins, hips, and back, would come on suddenly, without continuing above half an hour. For a few days his right hand was swelled, and in pain ; and for two days the calf of the left leg was too painful to bear being touched, but without any heat, redness, or swelling. He complained chiefly of the right side of the belly. During the last two months of his life he was harassed with an unconquerable diarrhoea. This illness proved fatal about the sixth month.

A large ulcer was found in one part of the spleen, and the rest of it seemed rotten. An adhesion had been formed between the spleen and peritonæum. No other parts were distempered.

A man forty-two years old had complained for several months of loss of appetite, flatulence, white stools, dark coloured urine, frequent bloody stools, tenesmus, perpetual nausea and attempts to vomit, chiefly in an empty stomach, excessive restlessness, want of sleep, bleedings at the nose, thirst, and light-headedness, though the fever was moderate. At last a sudden vomiting of blood came on ; which returning in five hours, put an end to his life. The spleen was found of an uncommon magnitude, but without hardness ; the inside of it was all dissolved into a bloody sanies. The glands of the mesentery were full of the same matter. The liver was sound. The portion of the stomach nearest to the spleen was inflamed ; and there were signs of inflammation in many parts of the intestines.

A woman was languishing for six months with a failure of appetite, and a swelling of the left side of the belly. There then came on sickness, and pain of the stomach, a total loss of appetite, a diarrhoea with great pain, which could not be stopped, and extreme restlessness, which lasted about six months longer. The spleen weighed fifty-two ounces, but was not ulcered, or scirrhouſ. The intestines were in a natural state, and there was no water in the abdomen.

§ 4. *Morbi Pancreatis.*

A woman had long been afflicted with a pain, as she said, of her stomach ; which was excessive for the last year of her life. She had no appetite, and what she did get down was vomited up. She could hardly procure any sleep. The pancreas was found scirrhouſ.

Another woman, whose pancreas was scirrhouſ, had complained for seven years of a pain in her stomach, and of pains in her bowels, and hips ; a numbness of her thigh and leg with a sense of cold ; loss of appetite, and frequent acid vomitings.*

CHAPTER XCVIII.

Vertigo.

A VERTIGO, giddiness, or swimming of the head, is a disorder incident to both sexes ; from which young persons, especially females, are not secure, though it be far more frequently found in the old and infirm.

From a consideration of the cases, which I have had an opportunity of observing, it seems probable, that many vertigos have arisen from disorders of the stomach, more still from those of the head, but most of all from general weakness. If I were to judge from the ages, the constitutions, the juvantia and lædentia, there is a very inconsiderable number of vertiginous complaints, which can be attributed to a fulness of blood, and too high health ; therefore in cases, in which there may be reason to suspect a plethora, we should proceed with caution, and feel out our way by observing how the first moderate evacuants were borne, and be guided accordingly in determining the degree of strength, and the number of repetitions, which we may afterwards venture to use.

Want of appetite, indigestion, flatulence, pain and weight in the stomach, sickness, vomiting, costiveness, and worms, have been found either to precede, or to be joined with a swimming of the head. Now, where some of these make either the only, or the principal complaints, next to the giddiness, we may reasonably conclude, that the head is affected only secondarily, and that the original seat of the disorder is in the stomach.

* A man, twenty-three years of age, had been afflicted for five months with pains in the bowels, upon the ceasing of which the stomach swelled, and there came on indigestion, a diminution of the quantity of urine, and weakness, which gradually increased ; lastly, a purging that could not be restrained. In the third month from the swelling of the stomach this man died. The pancreas was found enlarged to an enormous size, and ulcerated.—*E.*

'tormenting headaches, a lightness of the head, deafness, a singing in the ears, objects appearing double, temporary blindness, mists, black spots, or sparks and flashes of fire before the eyes, bleeding at the nose, hypochondriac and hysterical maladies, epileptic, paralytic, or apoplectic fits, lethargy, spasms, and convulsions (many of which are often united with vertigos), are all such manifest affections of the head, that where these predominate, the giddiness probably has its origin in the brain.

Lastly, a vertigo has been accompanied with languor, tremblings, faintings, and palpitations, and has supervened inveterate gouts, obstinate intermittents, asthmas, and other long disorders, profuse bleedings, and diarrhoeas, and has often made one of the train of evils belonging to a state of health much injured by the obstruction of some customary evacuation, as the menstrua, piles, sores, and cutaneous disorders, or utterly broken by intemperance, diseases, or old age. Nor is it unknown, that a vertigo should be the single complaint, the health being in all other respects unimpaired.

Where there is satisfactory proof that the vertigo is dependent upon some other disorder, the most reasonable manner of endeavouring to cure it will be by removing the primary complaint. But it must be owned, that it is often difficult, from the strange complication of symptoms, to decide what is the precise nature of the giddiness, or to account for the different events of remedies in circumstances apparently the same.

By the notes, which I have taken, it appears, that a spontaneous vomiting and diarrhea have always been beneficial; that snuff, too much business and fatigue, a crowd, the first waking in the morning, stooping, standing, walking, turning in bed, and any alteration of posture, hot weather, a warm climate, fasting, and evacuations, have generally tended to bring on, or to aggravate a swimming of the head: that cupping, a discharge by the piles, bleeding by leeches, or by the lancet, blisters, cutaneous eruptions, emetics, issues, cold bathing, and the gout, have sometimes been judged to relieve a vertigo; but that many of them have been far oftener useless, especially the gout, and blisters; but bleeding by the lancet, and strong cathartics have appeared to do harm much more frequently than good, and in most instances have at best been useless. If Bath waters have been innocent in this malady, they have never given me reason to think them beneficial. Cupping has often failed in relieving a present fit, but it has in several instances been singularly useful in preventing the returns, or in greatly mitigating their violence, by being used every two months, about six ounces of blood being taken away each time.

The danger attending a vertigo, and the difficulty of relieving it, are to be estimated from its having no concomitant ailments, or from their kind and number. Where it is accompanied with such as arise from the stomach, and especially if there be but a few of them, it is then more easily remedied, than when it is joined with affections of the head, the cure of which is tedious and uncertain. However, in hy-

pochondriac and hysterick cases, the danger of a vertigo is not much, though it may not be easily removed. But if the giddiness be only one of the many evils, of which an irreparably broken state of health consists, what hope can there be of a cure?

A vertigo unconnected with any symptoms of other diseases may probably be brought on by causes of too little importance to create any danger, or much disturbance to the general health; for such a vertigo, though considerable enough in some young men to endanger their falling, has not hindered their outliving it, and arriving at a healthy old age; and several have been frequently troubled with it for twenty, or even thirty years, with good health in all other respects.

CHAPTER XCIX.

*Vomitus.**

A DISPOSITION to vomiting is very various in different constitutions: some cannot be made to vomit by any means; others not without extreme difficulty, and great pain; while several are prompted to it upon the slightest occasions, and it costs them not the least trouble. I have seen one who performed a sort of rumination: and if the food staid too long in his stomach, before it was returned back for this purpose, it became sour, and made him sick, and was vomited up.

Vomiting seems so contrary to nature, that experience alone could satisfy us of the possibility of its being continued, as I have known it two or three times a day for many months, or many years, with little or no ill consequences to the health. One woman told me she had for thirty years vomited up all she had taken. In some cases, though all the food seemed to be vomited up, yet the patients have thriven, and grown fat. In pregnancy many women have judged that they brought up more than the whole of what had been swallowed, and that for a considerable time, without endangering the life either of the mother, or the child.

In hard drinkers, and breeding women, the morning is the most usual time of vomiting; this has likewise happened, though rarely, in some sober men; but in general it is either soon, or a few hours after eating, that the sickness comes on, which ends in throwing up the contents of the stomach.

The stomach is secondarily affected by sympathizing, in a great many disorders, with other parts of the body; and it has many ailments peculiar to itself, which hinder it from receiving, or retaining what has been swallowed: some of these are manifest after death, as scirrhouss obstructions of the cardia, or pylorus: there are many others connected with the unknown powers of the stomach, which occasion no alteration of its appearance after death, as far as our senses are able to judge; there being no more traces of them left, than of a nausea or vomiting excited by sudden ill news, or the

* See chap. lxv., concerning *nausca*, or *sickness of the stomach*.

sight or remembrance of disgusting objects. I remember one, who for many years had been subject to a vomiting of almost all his food, and often of great quantities of blood, whose stomach after death showed no signs of any disorder, though it was examined by some very experienced and skilful anatomists.

The matter thrown up by vomiting has been sometimes the food unchanged, sometimes a salt or acid liquor, or phlegm, and by great straining a little bile will be pumped into the stomach, and thence brought up. A fat, inflammable matter, has often been forced up by mouthfuls not long after eating ; and lastly, blood, or a liquor deeply tinged with blood, has been vomited frequently, and in great abundance, for several days together, with extreme loss of strength ; or else has returned, more like a chronic affection, in a slighter degree, two or three times a year for several years ; and though it have relieved a pain of the stomach, yet even this chronic sort must always be considered as the symptom of a dangerous disorder of this part. The apparent quantity of blood voided from the stomach upon these occasions is very alarming, and would be much more so, if it were not probable that blood itself makes often the least part of the bloody liquor which has been thrown up. Bloody, or black stools, have always accompanied a vomiting of blood. Some have had several returns of vomiting blood, and apparently in large quantities, for several years : and in others their first vomiting of blood has in two or three days ended in death. I know of no treatment required for this sort of hemorrhage different from what is mentioned in the Medical Transactions, vol. ii., Query 4. The necessity of keeping the patient quiet, and calm, and cool, appeared very strongly in one case, where the least drop of wine, warming the hands at the fire, putting them into warm water, a warmed bed, a blister, a purge, and any ruffle or disturbance of mind, were often experienced to renew the bleeding.

For other vomitings I have taken notice that purging, riding, and fat of every kind, have been prejudicial ; that the spontaneous clearing of the stomach has given no relief ; that an emetic has sometimes failed, or even aggravated the complaint. I was told by one person, that he had the patience to persevere in the use of emetics, till he had taken near forty, without any success. However, an emetic has very generally proved serviceable : it seems better calculated to relieve a sudden sickness, than to cure an old habitual vomiting. Bath waters have been remarkably efficacious in curing the morning sickness of hard drinkers ; but has failed in many other cases of sickness. The anodyne balsam rubbed in upon the stomach, has been very successful ; and so likewise has a blister applied to the region of the stomach. Acids have been useful to some of these patients, and the alkaline salts and testaceous powders to others. One person was cured by leaving off the use of bread ; and another by drinking water cooled by ice. But it must happen that these and all other means will fail in stopping a sickness and vomiting, which arises, as it has often done, from incurable disorders of the stomach or neighbouring bowels.

CHAPTER C.

Vox.

THE voice without any pain, or other disorder of the health, has been weakened so as never to rise above a whisper. In a slight degree of this complaint the persons are able to laugh in the usual manner; but they are sometimes as incapable of laughing, as of speaking, loud. Those who have once experienced such a failure of voice have been very subject to relapses. They have lost their voices suddenly without any previous notice, and recovered them as quickly without any apparent cause. Nine out of ten of those, whom I have seen in this complaint, have been women, and most of them, but not all, have been young and puny, or hysterick, or old and infirm.

An inability to speak beyond a weak whisper has frequently lasted for many months, and in some for several years in the same uniform manner. Others have lost their voices only for the morning, or afternoon, of every day; or for a certain number of months in every year. Sea bathing, and blisters, have been supposed to do some little service. Internal stimulants, and evacuants, have hardly been innocent; they have certainly been useless, and so have all other means which I have tried.

The sudden weakness of voice, of which I have been speaking, is very different from that hoarseness, which belongs to bad cough, asthmas, and catarrhs.

CHAPTER CI.

*Urina.**

AN eager desire of making water has been considered under the article of Stranguria, and Prostatae Scirrhous, and Calculus. Beside the causes there mentioned, it has been an attendant upon a scirrhouſe spleen, and upon hysterick and paralytic maladies, and has been one of the infirmities of old age, where there has been no other distemper. It has been very troublesome to several in the night, so as greatly to interrupt their rest; and it has teased others only in the day-time, suffering them to rest quietly in the night.

A difficulty of expelling the urine has not only arisen from the causes mentioned under Stranguria, and Ischuria, but also from a paralytic inability of the muscles which should expel it. In one man the catheter was necessary for this purpose during the space of two years, after which the parts recovered their use, and the inconvenience ceased.

The colour of the urine has been milky in a diseased prostate gland, and in other cases, where it might be owing to some purulent liquor with which it was mixed.

A large suppuration of an inflamed sore throat has been attended

* See *Calculus, Graviditas, Ischuria, and Stranguria.*

with a considerable quantity of pus at the bottom of the vessel which held the urine, for three or four days. As soon as the abscess broke and discharged itself, this purulent appearance in the urine ceased. This is the only instance that has occurred to me of any thing like a translation of matter from other parts to the kidneys.

In some broken constitutions, whenever water was made, there has followed a great languor, or sickness of the stomach.

An ulcer of the womb has in several women pierced the rectum and the bladder, so that wind and feces would come away with their urine. An ulcer, probably of the prostate gland, has had the same effect in men: and one person believed that the breach between the bladder and rectum had been the consequence of efforts occasioned by excessive costiveness.

A stone in the bladder, a diseased prostate, the fluor albus, frequent miscarriages, and some rough or pungent liquors, have occasioned a heat of urine, where there was no reason to suspect a venereal cause.

The bladder is naturally defended from the sharpness of the urine by a mucous substance with which it is lined. All irritation, from whatever cause it may arise, increases this glairy matter, which will adhere to the vessel into which it is made, like starch. It is very different from true pus, which settles at the bottom of the urine like cream; both these appearances have been found to arise from irritation joined with some inflammation, without any ulcer: there will at the same time be more or less eagerness to make water, and pain in making it, according to the degree and cause of the irritation. A diseased prostate gland, inflammations or ulcers of any of the urinary passages, strictures of the urethra, frequent venereal injuries, and the stone, or gravel, have been the common sources of these appearances in the urine. If the purulent liquor be considerable in quantity, mixed with streaks of blood, and fetid, while the neck of the bladder is in a natural state, it may probably be conjectured that there is an ulcer of the kidney, but of this it is hard to form a certain judgment.

An incontinence of urine, though void of danger, is yet an extremely inconvenient and distressing infirmity. Youth and old age are peculiarly liable to it. In some weakly boys it has continued from their infancy almost to the age of puberty; but much longer in girls, and in many more of them, and such who seemed in all other respects healthy. Females in general are more apt to have their urine pass away; so that laughing, or coughing, will more frequently force some of it from them, than from men; and some women, without any ill health, have all their lives had no power to retain their water. It is therefore a less alarming symptom in dangerous illnesses of women, than of men. Among the morbid causes of incontinence of urine may be reckoned all disorders of the urinary passages, the cutting for the stone, or the extraction of it by dilating the urethra, difficult labours, a prolapsus vaginae, venereal injuries, epileptic and paralytic affections, and whatever else can bring on extreme weakness in general, or of the urinary parts in particular.

A decoction of the Peruvian bark, and cold bathing, may be of some use in restoring more expeditiously the general strength after any illness, and so far contribute to remedy this infirmity; a blister may also be applied just above the os sacrum, in order to stimulate more particularly the parts concerned in retaining the urine. Where these have no effect, either time alone must cure the complaint, or it must be considered as incurable; in which case, for the use of males, a yoke has been contrived, which by means of a screw, compresses the urethra, and hinders the dripping of the water. I have known several try this contrivance, but they found it so inconvenient, that they soon laid it aside. Some in its room have substituted a bladder, in which the penis was constantly kept in the day-time: this may be less cumbersome, but is not so neat as a tin vessel, which others have used for the same purpose. The most effectual way of keeping the bed dry, is to put the penis and scrotum into a small chamber-pot, and to keep them in this situation all night. A little practice has made this method easy to several persons, who have preferred it to all others.

Urine made of a deep coffee colour, or manifestly mixed with a large quantity of blood, has within my experience very rarely been the effect of any thing but a stone in the urinary passages. I therefore suppose a strong probability of this cause, wherever I see this appearance; and if there be joined with it any of the usual symptoms of the stone, I have no further doubts. A very painful stranguary from the internal or external use of cantharides, has seldom, if ever, gone beyond making a slight redness of the water, with some few streaks of blood in the mucus.

A scirrrous prostate gland, when it becomes ulcerated, has occasioned some blood in the urine; but the quantity is very small, and is not increased by riding or walking; and whenever this is the cause, a surgeon by examining can hardly fail to discover it by the swelling and hardness. Cancerous sores communicating with any part of the urinary passages, may tinge the urine with blood; but these too may be conjectured from the constancy of the pains, from the small quantity of blood, from its not being remarkably increased upon motion, from the fetid mucus, or sanies, which issues from them, as well as from their wanting several peculiar signs of the presence of a stone.

A blow upon the loins has appeared to occasion bloody urine; and I suppose a blood-vessel may happen to burst in the kidneys, or bladder, not only from such a violent cause, but from as slight an one as it often does in the nose; though I do not remember such an instance. But I have once or twice known a very profuse bleeding into the urethra from some of the neighbouring vessels, without any previous distemper, or extraordinary injury of the part: the blood kept constantly running out without any effort to make water, and without its being in the person's power to check it. In one of these cases the bleeding returned frequently for two years, during which time the health was gradually impaired, and at the end of the second year the patient died; the grumes of blood were often voided with difficulty, and occasioned great distress.

In the worst kinds of small-pox the blood is well known to pour out from the urinary passages, as well as from other parts, in great abundance.

Many other causes of bloody urine are to be found in medical writers, which, if they exist, have never occurred in my practice. Quiet, and keeping the body cool, and open, are all the means of relief, with which I am acquainted.

CHAPTER CII.

Uterus.

A PROLAPSUS of the vagina or the womb is only to be relieved by a pessary : it is apt to be attended with an incontinence of urine.

Several women have experienced a sudden and great discharge of water from their wombs ; this has happened to the same women more than once, and about the time of the menstrua taking their final leave. No ill consequences have followed this appearance, besides weakness.

There has grown out from the womb a fleshy substance like a pear, the body of it being much larger than the stalk. This has extended itself so as to be perceptible in the vagina in straining upon going to stool. The great evil arising from this, is a constant discharge of blood from the dilated parts, which discharge will necessarily continue till the excrescence be removed. An experienced accoucheur assured me that he had taken away near twenty of these by passing a ligature as near as possible to the part adhering to the womb : in a few days after this has been done, the mass falls off, and the remaining stalk putrefies away, requiring nothing but frequent injections of an infusion of camomile flowers. He told me this operation had been generally successful, and it has proved so, where I have known it performed.

The furor uterinus does not always arise from a preternatural state of the womb, but, sometimes at least, differs not from common madness ; the mind, no longer under the guidance of reason, is made a prey to such thoughts as work it up to the œstrum venereum, instead of those which might inflame it with religious zeal, ambition, or a desire of revenge. I have seen it not only in the young and middle-aged, but in a dying old woman, who had long been in a broken state of health, from which circumstances, as well as from the decency of her character, it may be judged that all delight in the objects upon which she raved, had been long passed and forgotten. Besides, it happens sometimes to the other sex, that madness lets loose the passion of lust, as well as those of fear, or anger.

The womb, as well as the breasts of women, is subject to scirrhouss tumours, which slowly turn to incurable ulcers. This happens at the same time of life, with similar disorders of the breasts, that is, generally after the age of forty. The first symptom is often a return of the menstrual discharge after it had long ceased : but this is no cer-

tain sign ; for its re-appearance has sometimes proceeded from other causes,* as well as from a scirrhouſe state of the womb. In ſome women the firſt alarm is given by a copious discharge of a tenacious mucus like jelly, or of a thinner fluid, like the fluor albus : this has continued for one or two years, intermixed now and then with a discharge of blood, before any of the more violent symptoms have come on. These are, pains of the womb, in the groin, in the loins, in one or both of the hips, and in the thighs ; pains in going to ſtool, and in making water, with a tenesmus, and a frequent call to make water, a manifest fulneſs of the abdomen, and, at the ſame time, a ſense of emptineſs, and a hectic fever. The discharge afterwards becomes yellow, green, or black, and fetid ; and the pains are ſo excessive, as hardly to be endured without benumbing the ſense of them in ſome degree by large quantities of opium. They are ſcarcely increased by the motion of a carriage. In a few caſes the ulcer of the womb has eaten a paſſage to the bladder, and to the rectum. All these ſymp- toms do not happen in every caſe ; but a very few of them are ſufficient to ſhow the nature of the diſease, even before it has been ascertained by a midwife's examination of the womb.

The extract of hemlock washed down with a decoction of the Peruvian bark is at leaſt innocent in this diſorder ; but I have had very little reaſon to judge this, or any other medicine, to be of much avail in curing, or checking the progreſs of the cancer. One woman was very remarkably relieved, while ſhe was taking the extract, and at the ſame time uſing an injection of the decoction of hemlock ; the pains almost vaniſhed, and the womb remained in ſuch a quiet ſtate for ſome years, as to give very little interruption to her uſual amusements, or manner of living. But in moſt other caſes no good could be done, but by administering in a proper manner ſome preparation of opium.

THE CONCLUSION.

It might be expeсted, that the expeсience of fifty years ſpent in the practice of Physic, would have taught me more, than I here appear to have learned, of diſtempers, and their remedies. I readily confeſſ my knowledge of them to be ſlight and imperfect ; and that a conſiderable ſhare of this imperfection is chargeable upon my want of ability to make a better uſe of the opportunities I have had : but at the ſame time it muſt be allowed, that ſome part muſt be put down to the very great diſſiculty of making improvements in the medical art. This is too evident from the ſlow progreſs which has been made, though men well qualified by their learning, experience, and abilities, have for above two thouſand years been communicating to the world all they could add by just reasoning to the facts

* See Chapter lxii.

collected by attentive observation. Whoever applies himself to the study of nature, must own we are yet greatly in the dark in regard even to brute matter, and that we know but little of the properties and powers of the inanimate creation: but we have all this darkness to perplex us in studying animated nature, and a great deal more arising from the unknown peculiarities of life: for to living bodies belong many additional powers, the operations of which can never be accounted for by the laws of lifeless matter. The art of healing therefore has scarcely hitherto had any guide but the slow one of experience,* and has yet made no illustrious advances by the help of reason; nor will it probably make any, till Providence think fit to bless mankind by sending into the world some superior genius capable of contemplating the animated world with the sagacity shown by Newton in the inanimate, and of discovering that great principle of life, upon which its existence depends, and by which all its functions are governed and directed.

A P P E N D I X;

CONTAINING

1. A SKETCH of a PREFACE designed for the Medical Transactions,
1767.
2. OBSERVATIONS ON the CHRONICAL RHEUMATISM.
3. On the PULSE.
4. On opening a VEIN in HEMORRHAGES.

1. A Sketch of a Preface designed for the Medical Transactions, 1767.

THE world has had more than sufficient experience how far either building upon the ancients, or upon reasonings à priori, is likely to improve us in natural knowledge. By laying aside both these methods, and by attentively observing nature itself, a greater progress has been made during the last century, than had been till that time from the days of Aristotle.

The manner in which these observations have been communicated to the world, appears to have had no small share in the advantages which have been gained. The several learned societies in Europe, which have joined in forming one common stock of knowledge, have received contributions from many, who would otherwise never have

* Εὐείσαντος ἐγωθῆσις τοῦ διδασκάλοι, ταῦτα σταύρισθαι, ταῦτα τῷ χρόνῳ, εἴην.
Slobes Log. Phys., lib. i., page 19.

published the remarkable phænomena which chance had thrown in their way. They have likewise hindered many from overlaying their little original knowledge, by compilations from others, or by crude reasonings of their own, which they might think necessary to furnish out a just volume. Thus they have had the good effects of inviting some to tell all that they knew, and have lessened the temptation which others might have, to say more than they knew.

It is a misfortune to the world, that the several societies of physicians in Europe have not more generally adopted the same plan; as there can be no question made of its being attended with as much success in their particular study, as it has been in that of every other part of nature. It is high time that this should be done, as physicians have, like other natural philosophers, fully run the round of commenting the ancients, and contriving theories, and teaching systematical doctrines in many a celebrated school; and just with the same success.

The deference, which is sometimes required in physic to the authority of the ancients, would incline any one to suspect, that the improvements in the art of healing had not kept pace with those which have been made in other branches of natural knowledge. Philosophers have long ago thrown off Aristotle's tyranny; yet some physicians still choose to wrangle about the meaning of the ancients, rather than to consult nature herself. Are they afraid of approaching her immediate presence, without making use of the intercession of Hippocrates and Galen? and is that reverence to be still paid to her once faithful ministers, which is properly due to nature alone; notwithstanding all that Bacon, and Harvey, and Newton, and our other great reformers, have witnessed against this mistaken veneration? In works of genius the ancients are unquestionably our superiors, and best patterns; but in that sort of knowledge which depends wholly upon experience, the latest writers must in general be the best. But this disagreeable and unpopular topic needs be pursued no farther; not only because every scholar must be loth to say, or hear, any thing against the ancients; but because they are in reality very little read and attended to by practitioners, though the fashion of quoting and recommending them be still prevalent in some modern writers.

It has been an old dispute among physicians, whether the empirical, or rational method of curing diseases was to be preferred. If by the empirical method be meant that which is founded on facts recorded by others, or observed by ourselves, it must be allowed, that by this means only has the practice of physic been established. Fact, and repeated experiments, have alone informed us that jalap will purge, and ipecacuanha vomit, that the poppy occasions sleep, that the bark will cure an ague, and that quicksilver will salivate. If we examine the whole *materia medica*, and the whole practice of physic, we shall not find one efficacious simple, nor one established method of cure, which were discovered, or ascertained, by any other means.

Experience may, in politics and morality, be called the teacher of fools; but in the study of nature there is no other guide to true

knowledge : accordingly the practice of physic has been more improved by the casual experiments of illiterate nations, and the rash ones of vagabond quacks, than by the reasonings of all the once celebrated professors of it, and theoretic teachers in the several schools of Europe : very few of whom have furnished us with one new medicine, or have taught us better to use our old ones, or have in any one instance at all improved the art of curing diseases. Hence, though they have been applauded during the lives of their disciples, yet disinterested and impartial posterity has suffered each succeeding master of this sort to be gathered to his once equally famous predecessors, and to be, like them, in his turn utterly unread and forgotten.

It is necessary to be upon our guard even against experience itself, when delivered in a system ; the very notion of which seems to imply, that the facts and observations are not barely related, but are ranged into some method, and formed into one body dependent upon what the compiler takes to be their general cause or nature ; and hence arises the great danger of their being misrepresented in order to make them fit more exactly the several places which are assigned them. The Jews were commanded to build their altar with stones unhewn and untouched by any tool ; and, in like manner, the best materials of natural knowledge are the plain facts themselves, just as they come from nature ; he who pretends to new model and polish them, in order to their being adapted more perfectly to his system, has utterly polluted them, and made them unfit for the altar of truth.

Nor let any one apprehend, that physic will become too easy a study, by making it thus wholly depend upon experience ; and that, by losing the fence of learned theories, it will be an easy prey, open to the invasions of every ignorant pretender. For, whatever weight there may be in this objection, it will be found to be greatest against the way of theory and hypothesis ; this being much the cheapest, and most expeditious method of making a physician. A heated imagination will always supply us with knowledge, such as it is, much faster than the ordinary course of nature. The road of experience is tedious, and requires great judgment as well as patience. The contrary to this seems, indeed, to be the general persuasion : for every one is apt to fancy himself a competent judge of medical experience, and is ready to trust any one else who pretends to it. But, to form a right judgment, a man must be trained to a habit of thinking attentively by a learned education, and should not only be acquainted with the nature of the *materia medica*, but also with the several hypotheses, with the false philosophy, the mistakes in language, and other sources of error, upon which the supposed virtues of remedies have been, and are still often founded. And after all, it will be found extremely difficult, to determine rightly upon the intricate and contradictory evidence which is frequently brought for the effects of medicines.

The Peruvian bark was known and tried in Europe, at least forty years before its virtues and dose could be properly ascertained. The solvent power of medicines for the stone of the bladder, is what lies

much more obvious to the senses, than the efficacy of most other medicines ; and yet, in the late instance of Mrs. Stephens's remedy, how difficult a thing was it found to determine this, though tried in a variety of cases, which were diligently attended by the ablest judges ? No wonder, therefore, that out of the innumerable catholicons, or universal medicines, with which every nation and age has swarmed for these last thousand years, not one has survived ; and out of as great an inundation of specifics, or remedies for particular diseases, which have readily found patrons* sufficient to give them a fair trial, the bark and quicksilver are almost the only two, which have stood the test of time and general experience.

As therefore the art of healing owes so little to any other teachers, and so much to experiance, the College of Physicians in London is desirous of collecting the experiance of its members, and their correspondents, in the manner which has answered so well in the Royal Society here, and in many other literary associations abroad, and is therefore ready to receive medical papers in order to communicate such as are approved to the public.

For want of such an opportunity of communicating their knowledge, it has often happened, that many judicious practitioners have carried the whole experiance of forty years, spent in an extensive practice, with them to the grave, much of which would, probably, by the means now proposed, have been preserved, and might have been as useful to posterity, as it had been to their contemporaries.

Medical papers are, indeed, received into our own Philosophical Transactions, as well as into the journals and memoirs of many other learned societies ; but it is apprehended, that if a society of physicians professed to receive such papers, and communicate them to the public, there would be many more communicated, and perhaps, with better choice, and they would more certainly come into the hands of physicians, without being lost in the crowd of other papers.

If the present intentions of the College are seconded, as there is reason to hope they will be, they may excite in every practitioner belonging to it, a more constant attention to all the circumstances of remarkable and instructive occurrences ; they may strengthen the habit of noting, and of recollecting, and of forming conclusions from what passes before him, and prove the means of preserving some observations, which would otherwise be lost, not only to the public, but to the observer himself.

Though the principal view of the College be to perfect the history of diseases, and to ascertain the effects of medicines, yet any other papers will be received, which in any manner relate to medical subjects.

Many, who have communicated their observations to the world, have purposely picked out such as were rare and extraordinary, such as have seldom happened before, and may never happen again.

* *Communi enim fit vitio naturæ, ut invisis, latitantibus (al. intentatis), atque incognitis rebus magis consideramus.* Cœsar de Bell. Civ. lib. ii., c. iv.

Now, though these may be worth preserving, for almost all facts teach something, yet surely the preference ought not to be given to such as these, unless the chief end of our writing be to amuse the reader by gratifying his curiosity. If a man have only leisure to give either his unusual cases and cures, or such as may frequently occur in every day's practice, it would be more for the reader's use, if not for the writer's credit, to draw up only the latter, and leave, according to the proverb, *Θεαυτὰ μάργοις.*

It were also to be wished, that writers would not confine themselves to relate only their successful practice, but that they would have the courage to tell us the ineffectual and hurtful. It is sometimes almost as useful to know the lādentia (especially if they are likely to throw themselves in our way, if not carefully avoided) as the juvantia ; and any physician of great experience might make a very useful paper, by giving an account only of such medicines and methods of cure, which he had found to be useless and inconvenient.

Single cases of the catalepsy, hydrophobia, and other rare distempers, may be worth the relating ; but histories of particular cases, where the distemper is a common one, and of such effects of medicines as occur every day, must be endless, and would rather tire and oppress, than instruct the reader. Whatever important additions, or exceptions to the common practice, are contained in such cases, would much better be drawn out by the author, who can best do it, and presented by themselves, without giving along with them a tiresome history of common appearances, which every one had often seen, and was well acquainted with long before.

There may be some, but it is hoped there will not be much occasion for bespeaking the reader's candour, if some papers thus published by the College should appear less deserving of his notice. In so small a society, where the members are all personally known to one another, something must be expected to be given to civility ; as an author, who is usually not the best judge of his own works, may now and then have a fondness for some paper beyond its merit ; and the College may determine more out of regard to the writer, than to the piece. But this, we trust, will not often happen, nor in any flagrant instances ; and little matters, which may be imputed to this cause, the considerate reader will easily overlook, as without some indulgence of this kind, the design could hardly be carried on, and consequently, the papers of more importance would be lost.

2. *Of the Chronical Rheumatism.*

THE disease called the chronical rheumatism, which often passes under the general name of rheumatism, and is sometimes supposed to be the gout, is in reality a very different distemper from the genuine gout, and from the acute rheumatism, and ought to be carefully distinguished from them both.

It is attended with little or no fever, and most commonly with no very great pain ; and in both these respects it differs from the acute

rheumatism. The swellings are in most instances, though not in all, very great, but have hardly any redness; they are not particularly apt to begin in the foot, or if they do, they soon leave it, and pass on to other parts of the limbs, several of which, one after another, become the seat of the distemper in the very first fit. The true arthritic pains are different in all these circumstances, if we except the swelling, as well as in their intensity. An attention to these particulars will enable us in the very first week of the fit to form a judgment of its nature, and will show us to which of these three it belongs. Afterwards this will be further evinced by the extreme weakness it occasions in the limbs, and the severe shock which it gives to the constitution and general health, patients being often more disabled by a single attack of the chronical rheumatism, than they are by annual returns of the true gout for many years.

Arthritic patients seem peculiarly liable to the palsy, and apoplexy, beside having the use of their limbs destroyed in consequence of frequent inflammations of the joints, or contractions of the muscles: but all this mischief is in these patients the work of a long time, and to many of them it happens either not at all, or but in a slight degree; while the first fit of the chronical rheumatism, if it be continued, as it often has been, for several months, will do irreparable injury to the limbs, bringing on a state of almost paralytic weakness, and greatly impairing their use during the whole life. A frequent repetition of the disease has in six years totally taken away the use of all the limbs; and in some very bad cases this has happened even in the first year.

Nor is this rheumatism less strongly marked by the continuance of the first fit, from which few are so fortunate as to be released under three or four months; while the first fit of the true gout seldom lasts twenty days. It is much more apt to return than the acute species, under which many have laboured once, without ever experiencing it a second time. But though the chronical rheumatism most usually repeats its visits, yet their intervals are far more unequal than those of the gout. It may in some cases come on regularly once a year, for a few years; but others suffer two or three returns within the same year; and some patients have been hardly ever free for several years; while others again have had intermissions for five, or six, or even for near twenty years.

Cramps are very common in this disorder, as well as in the gout.

The swellings, which it occasions, are often remarkably great, and some degree of them will continue for many years, or for the patient's life, particularly in the wrists, and sometimes in the fingers, and ankles. The pains are not subject, like those of the acute sort, to be increased, but are rather relieved by the warmth of a bed. I have observed very few instances where the contrary to this has happened.

The stomach and bowels are much oftener, and more readily affected in this rheumatism, than in the true gout. Pain, nausea, and universal languor, are its ordinary effects in these parts. Upon

the application of a warm plaster, or liniment, to the affected limb, the distemper has presently been thrown upon the bowels; and in some instances, pains have seized the limbs and stomach alternately. Sometimes the anguish of the abdominal viscera, and the weakness of the extremities, makes this disease bear no little resemblance to the colic of Poitou; and they both bring on a rapid decline of the general health.

The distemper of which I am speaking, seems confined to no sex, and hardly to any age. The rich and the poor are equally liable to it. It has happened to me to see rather more women than men afflicted with it. In some it has begun at the age of twelve years; in others not till they were past sixty. Is it not in some degree hereditary?

The chronical rheumatism for a few days appears to be a milder distemper than either the acute sort, or the gout: but in its consequences, that is, in the great weakness, or total loss of power it produces in the limbs, and in the mischief done to the general state of the body, it is much more formidable than either of them; and being so very different in its symptoms, as well as in the event, it would be useful if it were distinguished by a peculiar name, which might prevent its being confounded with other disorders, by being called a spurious and wandering gout, or a chronical rheumatism.

The waters of Bath and Buxton, preparations of antimony and of quicksilver, sea-bathing, cold and warm bathing, blisters, and warm liniments, have in some of these patients been thought serviceable; but all these, together with bleeding, purging, sweating, and electrification, have been of no use to others; some have even thought them hurtful. A course of mercurial medicines has with great reason been suspected of bringing on something like this distemper in many persons; and it has appeared to do so in the same person five or six times, that is, as often as the mercury was repeated.

It is not surprising, if against a disease which has been so imperfectly discriminated, as the chronical rheumatism, no certain method of cure should have been discovered. Wherever that is the case, the physician will fully discharge his duty by attending to the troublesome symptoms, which it is often in his power to relieve, to the great ease and comfort of the sick, and by assisting nature in bringing all the functions of life as near as may be to their natural state in health. A prudent use of opium will be one of the means of obtaining these very desirable ends; and much good may also be done by supporting the appetite and digestion with Peruvian bark, and bitters, and other stomachic medicines; the class of which appears to have some specific power not only in this distemper, but likewise in the gout.

3. *Remarks on the Pulse.*

Read at the College of Physicians, July 7th, 1768.

ALL, who begin the study of physic, must find in the doctrine of

the pulse, as collected from medical writers by Bellini and others, a great deal which they do not understand ; and all, I imagine, who have advanced a little in the practice of physic, can have very little doubt of its not being understood by the authors themselves. Such minute distinctions of the several pulses, if they do not exist chiefly in the imagination, at least have little place in the knowledge and cure of diseases. Time indeed has so fully set them aside, that most of these names of pulses are now as unheard of in practice, as if they had never been given : and it may be doubted, whether some of those, which are retained, are perfectly understood, or applied by all to the same sensations, and have in every one's mind the same meaning. I have more than once observed old and eminent practitioners make such different judgments of hard, and full, and weak, and small pulses, that I was sure they did not call the same sensations by the same names.

It is to be wished, therefore, that physicians in their doctrine of pulses, and descriptions of cases, had attended more to such circumstances of the pulse, in which they could neither mistake, nor be misunderstood. Fortunately there is one of this sort, which not only on this account, but likewise for its importance, deserves all our attention. What I mean is, the frequency or quickness of the pulse, which, though distinguished by some writers, I shall use as synonymous terms. This is generally the same in all parts of the body, and cannot be affected by the constitutional firmness or flaccidity, smallness or largeness of the artery, or by its lying deeper or more superficially ; and is capable of being numbered, and consequently of being most perfectly described and communicated to others.

The degrees of quickness of the pulse belonging to the several ages and distempers, have been taken notice of by few physicians in their writings ; and as many observations are necessary to settle this doctrine, what I have made and am going to relate, may be of use towards confirming, correcting, or enlarging those which have been made by others. When the number of pulsations is mentioned without any time being specified, a minute is to be understood.

The pulse of children under two years old should be felt when they are asleep ; for their pulses are greatly quickened by every new sensation, and the occasions of these are perpetually happening to them while they are awake. The pulse then of a healthy infant asleep on the day of its birth, is between 130 and 140 in one minute ; and the mean rate for the first month is 120 ; for during this time, the artery often beats as frequently as it does the first day, and I have never found it beat slower than 108. During the first year the limits may be fixed at 108 and 120. For the second year at 90 and 108. For the third year at 80 and 100. The same will very nearly serve for the fourth, fifth, and sixth years. In the seventh year the pulsations will be sometimes so few as 72, though generally more : and, in the twelfth year in healthy children they will often be not more than 70 ; and therefore, except only that they are much more easily quickened by illness, or any other cause, they will differ but little from the healthy pulse of an adult, the range of which is from a little below 60 to

a little above 80. It must be remembered, that the pulse becomes more frequent, by ten or twelve in a minute, after a full meal.

If the pulse either of a child, or an adult, be quickened so as to exceed the utmost healthy limit by ten in a minute, it is an indication of some little disorder. But a child is so irritable, that during the first year, a very slight fever will make the artery beat 140 times, and it may beat even 160 without danger ; and as there begins to be some difficulty in counting the pulse when the motion is so rapid, the thirst, quickness of breathing, averseness from food, and above all, the want of sleep, enable us, better than the pulse, to judge of the degree of fever in infants.

A child of two years may die of an inflammatory fever, though the artery beat only 144 times in a minute ; and I have seen a child of four years recover from a fever, in which it beat 156 times ; and one of nine, where it beat 152.

If the pulse of a child be 15 or 20 below the lowest limit of the natural standard, and there be, at the same time, signs of considerable illness, it is a certain indication, that the brain is affected, and consequently such a quiet pulse, instead of giving us hope, should alarm us with the probability of imminent danger.

In adults ill of an inflammatory fever the danger is generally not very great, where the beats are fewer than 100 ; 120 show the beginning of danger ; and they seldom exceed this number unattended with deliriousness, and where the patient does not die. There are two exceptions to this observation : the first is, that before some critical swelling or deposit of matter begins to show itself in fevers, the pulse will be so rapid and indistinct, as hardly to admit of being counted ; but I have known it certainly not less than 150, and yet the patient has recovered. Acute rheumatisms afford a second exception ; in which the artery will often beat above 120 times without any sort of danger ; and in both these cases we may remark, that the appetite and senses, and sleep, and strength, are put less out of their natural state, than where the life of the patient is in imminent danger.

Though it be difficult to count above 140 strokes in a minute, if if they be unequal in time or in strength, yet where they have been very distinct, I have been able to count 180.

Asthmatic persons are often seized with an uncommonly bad fit, arising probably from some great inflammation of the lungs ; and here, if the pulse exceed 120, they very rarely recover.

In an illness where the pulse all at once becomes quiet from being feverishly quick, while all the other bad signs are aggravated, it is a proof, not of the decrease of the disorder, but of the lessened irritability of the patient, the disease being translated to the brain ; and a palsy, apoplexy, or death, is to be apprehended.

In low fevers, and in exhausted old men, the pulse will often continue below 100, or even 90, and yet the distemper be attended with want of sleep, deliriousness, restlessness, and a parched tongue, and end in death, without any comatous or lethargic appearances.

Scirrhous disorders of any of the viscera in an inflamed state, can-

cers, and gangrenous or otherwise ill-conditioned large ulcers, usually occasion a gradual loss of flesh, a heat, thirst, and a pulse between 90 and 120 for many months. This state of the body is called a hectic fever; and some judgment may be formed of the degree of danger by the frequency of the pulse. But a quickened pulse more certainly denotes danger, than a natural one does security, where there are ulcers, or where disorders of the viscera are suspected. I have known persons die of cancerous ulcers of the anus, testicles, prostate gland, and of almost all the viscera, without ever showing any preternatural quickness of the pulse. It is observable in hectic, as well as in rheumatic patients, that they will eat with a tolerable appetite for many months, and bear little journeys, with such a quickness of pulse, as in acute fevers would be joined with an averseness from all food, and an inability to keep out of bed.

From these remarks it appears, that the pulse, though in many cases an useful index of the state of the health, yet is no certain one in all; and that, without a due regard to other signs, it may mislead us: a good pulse (which I have known in comatous fevers) with deliriousness, rapid loss of appetite, and strength, sleeplessness, quickness of breathing, and great thirst, would afford very little hope; and a bad one without any of these might be harmless.

I remember two young women ill together with others in the same house, of the same infectious fever; the pulse of one of which was never above 84, and the pulse of the other was always extremely quick, and I once counted it, when I thought her dying, 180. Both of them recovered, and the latter quite beyond my expectation; for, except in this instance, I hardly remember any one recover from such a fever, where the pulse exceeded 120. But the first of these was stupid, insensible of the coming away of her water or stools, and perhaps her brain was affected comatosly, which might make her pulse so slow.

The pulses of women will sometimes exceed what I have mentioned as the highest limit of the healthy standard, and sometimes, though more rarely, those of men; but the pulses of men afford more exceptions in falling short of the lowest. There are very few healthy men, whose pulses are more than 90; and I knew one, whose chief distemper was the age of fourscore, in whom for the last two years of his life, I only once counted so many as 42 pulsations; but they were seldom above 30, and sometimes not more than 26; and though he seemed heavy and torpid, yet he could go out in a carriage, and walk about his garden, receive company, and eat with a tolerable appetite.

I saw another, whose pulse, as I was told, was sometimes in the beginning of his illness not above 12 or 16 in a minute; but in this, and all other instances where it is below 40, I suspect that the artery beats oftener than it can be felt; because such slow pulses are usually unequal in their strength, and some of the beats are so faint, as but just to be perceived; so that others, probably, still fainter, are too weak to make a sensible impression on the finger.

Some books speak of intermitting pulses as dangerous signs, but, I think, without reason ; for such trivial causes will occasion them, that they are not worth regarding in any illness, unless joined with other bad signs of more moment. They are not uncommon in health, and are often perceived by a peculiar feel at the heart by the persons themselves every time the pulse intermits. A woman above fifty years of age, who died of a cancer of the womb, had from her youth frequently experienced this sort of intermitting pulse ; and that the cause of this intermission might be discovered, she was opened after her death, as she had desired she might be. It was done by a very experienced and able anatomist ; but he could discover not the least appearance of any thing preternatural in the pericardium, or heart, or any of the great vessels belonging to it ; so that, for aught that appeared to the contrary, she might, notwithstanding this complaint, have died of old age.

Many persons will likewise have unequal pulses without any other sign of ill health. I have met with two, who in their best health always had pulses very unequal both in their strength and the spaces between them ; upon their growing ill, their pulses constantly became regular ; and it was a never-failing sign of their recovery, when their arteries began again to beat in their usual irregular manner.

It is often supposed that great pain will quicken the pulse : I am more sure that mere pain will not always do it, than I am that it ever will. The violent pain occasioned by a stone passing from the kidneys to the bladder, is often unattended with any quickness of the pulse ; and the excessive and almost intolerable torture produced by a gall-stone passing through the gall-ducts, has in no instance quickened the pulse beyond its natural pace, as far as I have observed, though it be a disorder which occurs so very frequently : and this natural state of the pulse, joined with the vehement pain about the pit of the stomach, affords the most certain diagnostic of this illness. I have seen a man of patience and courage rolling upon the floor and crying out through the violence of this pain, which I was hardly able to lull into a tolerable state with nine grains of opium given within twenty-four hours, to which he had never been accustomed, and yet his pulse was all the time as perfectly quiet and natural, as it could have been in the sweetest sleep of perfect health.

4. *On Opening a Vein in Hemorrhages.*

Read at the College of Physicians, December 11, 1771.

It has been the practice of physicians to take away blood from the arm, or foot, in order to stop violent hemorrhages from some other parts, which do not admit of a topical application.

If it be intended by this practice to weaken the power of the heart, and to give the lips or ends of the broken blood-vessel a chance of collapsing, or of being plugged up by means of a more languid circulation, would not all this be as likely to happen after the patient had been equally weakened by losing the same quantity of blood

from the original rupture? And in the meantime he might stand a chance of its stopping spontaneously, before he was reduced to that degree of weakness.

It seems probable, from all the experience which I have had of such cases, that where the hemorrhage proceeds from the breach of some very large vein, or artery, there the opening of a vein will not stop the efflux of blood; and it will stop without the help of the lancet, when it proceeds from a small one: in the former case, bleeding does no good; and in the latter, by an unnecessary waste of the patient's strength, it will do harm. But if the opening of a vein be intended to stop an hemorrhage by deprivation or revulsion, may it not be questioned, whether this doctrine be so clearly established, as to remove all fears of hurting a person, who has already lost too much blood, by a practice attended with the certain loss of more?

The best remedies seem to be a cool air; quiet; a very sparing mild nourishment, administered in small quantities at a time; drinks acidulated with any acids; opiates in small doses (for any strong perturbation of mind will often occasion a return of the bleeding); and lastly, keeping the body moderately open. A very experienced physician told me, that, by the help of gently purging with some of the salts, he had done more good in excessive losses of blood from the nose, than by any other means. I do not lay any great stress upon the use of internal astringent remedies, because it does not appear likely from reasoning that they should do any service; and I am far from being convinced by experience, that they ever do, except perhaps in hemorrhages of the primæ viæ. They may sometimes have appeared to be attended with success, because there is but a very small proportion of hemorrhages, not owing to external violence, which would prove fatal, though no means were used to stop them; and hence it has happened, that a great number of other external and internal medicines have been very undeservedly advanced to the rank of specifics in this complaint. *Saccharum saturni* has appeared to me to have the best title to be called an internal specific: and it is very unfortunate, that the useful quality of this, and other preparations of lead, should be joined with others of such a dangerous nature; for I hardly ever saw a case, in which the probable good to be expected from them as styptics, would counterbalance the many certain mischiefs arising from their internal use.

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A T R E A T I S E O N P O I S O N S
IN RELATION TO MEDICAL JURISPRUDENCE, PHYSIOLOGY, AND THE PRACTICE
OF PHYSIC.

By ROBERT CHRISTISON, M.D., F.R.S.E.,

Professor of Materia Medica in the University of Edinburgh, &c., &c.

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